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ENCYCLOPEDIA OF INDIAN PHILOSOPHIES

VOLUME XIII

Nyāya-Vaiśeṣika Philosophy from 1515 to 1660

Edited by
SIBAJIBAN BHATTACHARYYA
KARL H. POTTER

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IN MEMORIAM: SIBAJIBAN BHATTACHARYYA

It is my sad duty to have to write this memorial to my old and good friend Sibajiban Bhattacharyya. Born in 1926, and having won many medals and honors during his schooling in and around Calcutta, he gained his first appointment in 1949 at Saugar University, moving to Burdwan, near Calcutta, in 1962, where he stayed until 1973. By that time, having gained renown as an exceptional scholar, and having published a number of articles in respected journals, both Indian and Western, he spent several years as Professor of Philosophy at the Centre (or Institute) of Advanced Studies in Simla. He finally arrived for good back in Calcutta, first as Professor at North Bengal University and then as Acharya B. N. Seal Professor of Mental and Moral Sciences at the University of Calcutta, where he remained until his retirement in 1988. During this period he also taught as Visiting Professor at the Victoria University in Wellington, New Zealand and at the University of Washington in Seattle, U.S.A. He was Director of the Institute of Universal and Spiritual Values of the Asiatic Society in Calcutta (1986-88) and lectured regularly at the Ramakrishna Mission Institute, Gol Park, Calcutta (1987-1994). Even after retirement he continued teaching and writing at several of the above-mentioned centers of higher education. During these periods he received many laurels, among them General President of the Indian Philosophical Congress in 1987. He gave Memorial Lectureships at various Indian universities between 1977 and 1993.

His major publications are listed below. Though his central concern became classical Indian philosophy, especially the Navya-Nyāya, he was a keen student of Anglo-American philosophical analysis, as will be evident not only from the references in the Introduction to the present volume that follows, but also from the many articles he published in major Western philosophical journals such as *Mind, Analysis, Philosophy and Phenomenological Research,* and the *Notre Dame Journal of Formal Logic.* And of course it must be mentioned that he collaborated in the preparation and production of Volume Six of this *Encyclopedia of Indian Philosophies.*

To me he remains a life-long colleague in our chosen field of specialization. Sibajiban and I must have first met at a philosophical meeting some time in the 1950s, quite possibly one hosted in 1953 by the Maharaja of Mysore. But my first clear memory of him stems from a visit my wife and I made to

Saugar in 1958, where another old and recently departed friend, Daya Krishna, was also teaching at that time. After that I visited Sibajiban a number of times in Calcutta, being warmly received and fed in the Bhattacharyya's home by Sibajiban and his wife Arati. But the strongest memories my wife and I have are of the family's visit to Seattle in 1981, where Mr. and Mrs. Bhattacharyya were accompanied by their charming and talented daughters Sheuli and Shyamasree. The young ladies have gone on to become academics in their own right. Sheuli is now teaching at Manipal University in Karnatak, while Shyamasree is on the Philosophy faculty at the Alipur campus of the University of Calcutta. I recently learned that Mrs. Bhattacharyya passed away in early 2008.

In closing, I wish to express my thankfulness at having had such a wise and caring friend and colleague as Sibajiban. He was always generous in his participation in our scholarly ventures. My life and work have been infinitely enriched by his participation, for which I am forever grateful.

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PART ONE

INTRODUCTION

(Sibajiban Bhattacharyya)

I. Metaphysics

A. Substance in General

It is well-known that Navya-Nyāya philosophers generally accept Vaiśeṣika's scheme of seven categories. The first category is substance. There are almost an infinite number of substances and nine different kinds of substances. A proof that there are substances cannot consist in enumeration. So the Navya-Nyāya philosophers try to prove that there is a universal of substance-hood which will be present in all and only substances. To prove that there is substance-hood Navya-Nyāya philosophers find out the limiting property of cause-ness, the property in virtue of which a cause counts as a cause. For such a limiting property of cause-ness must be a universal. The first argument which Viśvanātha[1] gives in his *Siddhāntamuktāvalī* argues that substance-hood is proved to exist as a limiting property of inherent cause-ness (*samavāyikāraṇatā*), for all and only substances can be inherent causes. Now this proof of substance-hood becomes too heavy because there is an infinite number of inherent causes. So Viśvanātha gives a second proof of the inhering cause-ness of contact. But this proof is defective because Navya-Nyāya philosophers do not usually admit contact between ubiquitous substances. So this proof excludes the ubiquitous substances. So a third proof of substance-hood is given, that is the limiting property of disjoining. As all substances and only substances are disjoint from something or the other, this proof of substance-hood is accepted by Viśvanātha.

There are substances which have three different magnitudes. The smallest magnitude is of the smallest part of earth, water, fire and air. The internal organ, too, has the smallest magnitude. Then there are substances of intermediate magnitude like a jar, a hill, the earth and the universe. Then there are substances of the greatest magnitude or ubiquitous substances like *ākāśa*, space, time, an individual self, and God. The first three ubiquitous substances are material but cannot be perceived. They have to be inferred from their qualities which

[1]Prof. Bhattacharyya follows the prevailing opinion in taking Viśvanātha to be the author of *Bhāṣāpariccheda* and the *Siddhāntamuktāvalī* on it. As pointed out later, this identification is questionable. However, in deference to custom we leave the reference unchanged.

are perceived. Thus space is inferred from the perception of things which are far and near. Farness and near-ness are qualities of space which are perceptible. So also time is inferred from the properties *being old* and *being new* which are its qualities. The individual self may be perceived in introspection as qualified by qualities of awareness, etc. The pure self devoid of all qualities can be inferred from introspection of awareness.

Annambhaṭṭa defines awareness or cognition as a quality of the self which is the cause of all behavior. Some commentators interpret the term "all behavior" to mean only verbal behavior.[1] Their point is that one can use language only when one knows the language. Other commentators, however, interpret the term "all behavior" to mean all purposive behavior. Cognition as a quality of the self is inferred as the cause of all purposive behavior.[2] Annambhaṭṭa, however, in his own commentary *Tarkasaṃgrahadīpikā* states that the characteristic mark of cognition is to be known infallibly in introspection of the form "I cognize" (or "I am aware"). Cognition-ness, which is a universal, is the characteristic mark of cognition. Nīlakaṇṭha in his commentary explains that only cognition-ness is the defining characteristic of cognition. To say that it is revealed in introspection that I am cognizing a jar, etc., cannot be explained without a common property. This common property is the universal cognition-ness which is established by the law of parsimony.

B. The Individual Self

Each individual self is an ubiquitous substance. This means that every individual self is of infinite magnitude. An individual self has fourteen qualities starting with (i) number, (ii) magnitude, (iii) separateness, (iv) contact, and (v) disjunction. These five qualities a self shares with material objects. Then there are nine special qualities of a self which are not present in any material object. These are (vi) cognition or awareness,

[1]For example, Govardhana Miśra, author of the *Nyāyabodhinī* commentary on the *Tarkasaṃgraha*, and the author of *Niryukti*, another commentary on *Tarkasaṃgraha*.

[2]Candraja Siṃha, author of *Padakṛtya*, a commentary on the *Tarkasaṃgraha* (Banaras: Shriharikrsnanibandhabhavanam, 1987) says: *Sarve ye vyāvahārādhārāvihārādayas treṣāṃ ḥetuḥ*.

(vii) pleasure, (viii) pain, (ix) desire, (x) aversion, (xi) volition (which is a cause of bodily action), (xii) memory traces, (xiii) merit and (xiv) demerit. Although all these nine qualities are internal qualities of a self, still they are cognized very differently. Awareness of objects is cognized in a second order, introspective, awareness. But pleasure and pain, although internal states of the self, are not of the nature of consciousness. "Consciousness" or "awareness" is synonymous with "cognition". Pleasure, pain and internal effort are cognized by a separate cognition a moment after they come into existence. Pleasure, pain and internal effort, although unconscious states, are invariably cognized at the next moment after their origination. This internal perception is a mental perception.

Memory traces, merit and demerit can be known only through inference. A memory trace is inferred from the memory-cognition which is produced by it. Merit and demerit are inferred from their effects. Merit causes happiness and demerit causes pain or suffering. Happiness and pain are mentally perceived.

We should note here that although pleasure or happiness, pain or suffering, and internal effort are invariably cognized at the next moment after their origination, cognition is not invariably known in introspection. A cognition may be known in introspection if the person desires. Otherwise there will be an infinite series of introspective cognitions which will never end and which will make any other cognition impossible.

One's own self is internally perceived as an object endowed with an ego (*ahaṃkāra*). This means that the sense of ego is intrinsic to the self. The self of another person is to be inferred from his bodily behavior. It is not an analogical argument or knowledge by comparison (*upamāna*), but an inference (*anumāna*).

The existence of a self is proved by inference. Materialists identify the self with the body. Viśvanātha argues that this identification is not justified, because the body exists even when the individual is said to be dead and thus seems to outlast the disappearance of consciousness. Also the body of a child changes beyond recognition as the child grows into a youth and a youth grows into an old man. Now the question is: with which body is the self to be identified? If it is identified with the body of a new-born baby then as the body changes beyond recognition memory will be impossible, for there will be as

many selves as there are different stages of the body. If the self is thought to be transmitted to the successive bodies, then many different bodies will have to contain almost an infinite number of traces. This will make the assumption very heavy.

The self cannot be identified with a sense-organ. For if a sense-organ is damaged or destroyed there ought not be memory of the experiences acquired through the sense-organ. But even when a sense-organ is damaged or destroyed memory of experiences endures.

It may be argued that the internal organ (*manas*) is eternal, so there can be no possibility of its destruction. The self-substance, too, is eternal, and hence it may be identified with the internal organ. Now Navya-Nyāya philosophers accept the old Nyāya theory that the internal organ is atomic in size. If the internal organ is identified with the self than there would be no possibility of internal perception or introspection. For no object of atomic size can be perceived; its attributes, too, can never be perceived. But since the self qualified by cognition becomes a content of internal perception, the self cannot be identified with the internal organ.

God is the supreme self. He does not have any body. The supremacy of the supreme self is God's omniscience. God's knowledge is one, eternal, and immediate. It is of all objects, past, present and future. God does not need to perform different acts of awareness. His knowledge is eternal. God's omnipotence is, however, restricted. He creates all objects which are created. As Navya-Nyāya admits eternal objects like atoms, *ākāśa*, space, time, the internal organ and individual selves, they are not created, they are as eternal as God himself. God is omnipresent only as an ubiquitous substance. As there are many other ubiquitous substances, this attribute of God is not anything special to him.

Liberation is not the identification of the individual self with God. This identification will be false, for they are really different. Liberation is the cessation of all suffering for all time to come.

C. Body

According to Viśvanātha air is of two types–eternal and non-eternal. Atoms of air are eternal. Non-eternal air is of three types–bodily, sense-organs and object. Bodies made up of air are asexual. The bodies of departed individuals (*preta*) and other disembodied beings (*piśāca*) have bodies made up of air.

The sense-organ of touch, which covers the entire body, is primarily made up of air. The sense-organ of touch can produce only touch-sensations, and touch is an attribute of air. The non-eternal object is breath (*prāṇa*).

According to Viśvanātha, bodies are of two kinds–those which some out of women's wombs and those which do not require women's wombs. The bodies of the first type are of two sorts: one type is bodies which are born from women's wombs as individuals like human beings. The second type is of those animals which come out of eggs, like snakes, etc. Those which do not require women's wombs are of two types. First of all there is abiogenesis. For example, Viśvanātha says that mosquitos are born in damp places. The second type is of trees. Trees originate from seeds which do not require women's bodies. Moreover, those who are in hell have bodies which do not come from women's wombs.

Sense-organs are all elemental. We have already explained the sense-organ constituted by air. Now Viśvanātha says that the olfactory sense-organ is made up of earth. For this sense-organ produces only the sensation of smell.

Objects made up of earth range from the dyads to the universe. Viśvanātha explains that although bodies and sense-organs are also objects, still they are distinguished here in order to make disciples understand their distinction better.

We have already mentioned that earth, water, fire and air are the four substances which can be atomic. The use of the word "atom" is inappropriate here. Gross matter of the four different kinds can be analyzed to reach simple, unanalyzable and ultimate parts. The simplest part of earth has smell and so on. Earth has innumerable simplest parts. They are distinct from one another by means of ultimate *differentia* (*viśeṣa*). Each earth atom has its own ultimate *differentium* by means of which it is differentiated from other simplest parts of earth, but these simplest parts cannot be called "atoms" because they possess the attributes of gross matter. An atom cannot possess the attributes of a gross object, but as Nyāya philosophers, both old and new, accept the theory that the simplest parts (*paramāṇu*) possess the attribute of gross matter, they cannot be called "atoms". They cannot be regarded as molecules either, because molecules are not usually indivisible. In exceptional cases there are molecules consisting of single atoms which correspond very roughly to the Nyāya concept of *paramāṇu*.

The magnitude of *paramāṇus* cannot be the causes of any

gross objects. Gross objects may be big or small. This difference in their size is due to the number of *paramāṇus*. So Viśvanātha in his *Bhāṣāpariccheda* asserts that the magnitude of the *paramāṇus* cannot be a cause of the magnitude of a gross object. Their number is the cause of the magnitude of the gross object. A big object has more *paramāṇus* than a small object.

D. Space and Time

According to both old and new Nyāya philosophers space is a substance. Because space is a ubiquitous substance, it is the locus of contacts with all substances of restricted magnitude. All the substances are related to space by spatial relation. This means that all substances which are space are related to space by no further relation. Space itself is the relation, although it is also a term (locus) of the relation. When a term of a relation becomes itself the relation we have a term which is a self-linking connector (*svarūpasambandha*).

Although space is ontologically one, it has ten directions–east, west, north, south, northeast, northwest, southeast, southwest, up and down. In spite of these ten different directions, space is not partitioned into pieces, but remains one and the same ontologically.

Time is also a ubiquitous substance. Although space and time are material substances, still they have the greatest magnitude. All substances of restricted magnitude are located in time. Moreover, time is a cause of everything that is created. That is because the cause is an antecedent and the effect a consequent. So time is necessary for causal relations. Moreover, according to Navya-Nyāya philosophers time itself is a cause of everything that is created.

Although time is ontologically one it is divided into past, present and future. Although time is eternal, sometimes it is regarded as finite and is identified with the object occurring in time. For example, a particular jar is in time, and that portion of time is identified with the jar (*ghaṭātmaka kāla*). Thus one infinite eternal time (*mahākāla*) is restricted by imposed properties (*upādhi*).

Like space, objects which are in time are related to time by time itself. This means that time is a term of the relation and also the relation itself. This self-linking connector is called temporal relation (*kālikasambandha*).

There are many forms of temporal relations. For example, two substances may be simultaneous, one may precede the other, or one may succeed the other. There may also be immediate precedence or immediate succession of objects. A cause is sometimes the immediate precedent of the effect. There are other forms also of temporal relation, which are not discussed here.

E. Relation

A relation, in Navya-Nyāya, is usually a dyadic relation, although as we shall see there are other types of relations–many-one, one-many, and so on.

A relation has been defined in two ways–objectively and epistemically. Objectively a dyadic relation is that which unites two terms. Epistemically a relation is defined as the content of a construction-filled cognition[1] (*savikalpakajñāna*) having two terms and which is different from its qualificand (*vaiśiṣṭya*) and qualifier (*viśeṣaṇa*). A construction-filled cognition is the cognition of something as something Thus we may cognize this thing as a jar, i.e., as jar-ness-possessing. This cognition of a jar is expressed in language by the single word "(a) jar". A construction-filled cognition has as its content a structure with three elements:

(i) The qualificand is that which is cognized: in the present example, the jar. (ii) The qualifier is the mode under which the qualificand is cognized–in the present example, jar-ness. (iii) The relation is the relation between the qualificand and the qualifier, in this example, the relation of jar-ness to the jar, which is inherence.

All these three elements constitute the relational complex which is the content of a construction-filled cognition. A relation is defined as that content of a construction-filled

[1] General Editor's note: Sibajiban Bhattacharyya, in the manuscript of this Introduction which he submitted for publication, has used a variety of words to translate "*savikalpaka*" and "*nirvikalpaka (jñāna)*". He rendered the first ("*savikalpaka*") there as, e.g., "qualificative, qualifying, propositional, determinate, complex, qualified", etc. In order to clarify this situation, to indicate the technical nature of the terms while maintaining consistency in translation, I have taken the liberty of substituting the translations of the terms used in previous Volumes of the Encyclopedia, viz., "construction-filled (awareness)" and "construction-free (awareness)" respectively. I realize these terms grate on some readers ears, but it seems preferable to find a consistent translation that at least should not confuse people about what Sanskrit term is being translated.

cognition which is different from the qualificand and the qualifier of that cognition.

This way of defining a relation in terms of the content-hood of a construction-filled cognition makes the Navya-Nyāya concept very different from the usual Western concept. Firstly, it is the cognition which has to be cognized as a construction-filled cognition in introspection before one can get the idea of a relation. Secondly, a relation relating two terms forms only a qualified or compound content, not a fact. This means that a relational expression does not form a sentence from two names in the sense of Western philosophy: it only forms a complex term. This is because a relational cognition, i.e., a cognition of a relation, is a cognition of something as something, something qualified by something. Thus when we cognize what is really a jar as a jar, we have the cognition of a jar as jar-ness-possessing, where "possessing" stands for the relation of inherence.

A relation is defined here as relative to a cognition. According to Navya-Nyāya there is no separate category of reals which are relations. What is cognized as a relation may or may not be real ontologically. So far, as far as the ontological status of a relation is concerned, Navya-Nyāya classifies relations into three altogether different kinds.

(a) The first kind of relation is just one–viz. inherence, which is ontologically a separate reality. Thus although Navya-Nyāya admits this one particular relation, inherence, as an ontological category, it does not admit relations in general as forming a separate ontological category.

The postulation of this one relation as a category is often cited as solving the problem of infinite regress of relations, for eventually the regress is stopped when this relation is reached. Such a relation is usually regarded as not requiring any further relation to relate it to its terms, for it is ontologically of the nature of a relation and hence is radically different from other elements in the ontology. But Navya-Nyāya does not use inherence in this way to stop the infinite regress of relations. The method of Nayva-Nyāya is very different because, for one thing, when inherence itself is denoted by the word "inherence" it becomes an object like all other objects in the ontology. According to Navya-Nyāya, whatever is denoted by a word is the qualificand in the cognition which the hearer has on hearing the word. Thus inherence as denoted by the word "inherence" is the qualificand of the cognition of inherence.

One consequence of this theory of word-meaning is that a relation cannot function as a relation if it is denoted by a word. As every construction-filled cognition is also necessarily a cognition of a relation, the cognition cannot involve a word denoting the relation. Navya-Nyāya accepts the principle

(P) Everything is related by some relation or other to every thing.

Even a relation like inherence can be promoted to a term by simply being named by a word. A relation functioning as a relation, not as a term, in a construction-filled cognition has, therefore, to be indicated by word-order in the sentence expressing the cognition, but is never denoted by any word.

(b) Thus Navya-Nyāya does not have any difficulty in holding the view that anything belonging to any category of reals can function as a relation in a construction-filled cognition. In the construction-filled cognition

jar-possessing is the ground

we have the ground as the qualificand of the cognition, jar as the qualified, and contact as the relation indicated by "possessing" which makes contact a term. Thus it is impossible to express in language a cognition that contact is the relation between the jar and the ground.

Then how it is that we can talk about cognizing's involving all sorts of relations between a qualificand and a qualifier? Navya-Nyāya has developed a technical language in which it is possible to state what relations have been cognized in cognitions. This technical language is required because in ordinary language there is no way of expressing relations. This technical language of Navya-Nyāya is not a metalanguage in the sense of a language about a language. In the technical language of Navya-Nyāya we denote relations by relation-words, but the relations thus denoted in the technical language do not get promoted to terms in ordinary language. Thus in order to express the cognition under discussion Navya-Nyāya describes it as the cognition with the ground as its qualificand, the jar as its qualifier, and contact as the relation between them. In the technical language of Navya-Nyāya this cognition is described as having its qualifier-ness limited by jar-ness and the relations of contact determining the qualificand-ness resident in the ground and limited by ground-ness. If contact is, as a matter of fact, cognized as the relation in a cognition, then the cognition, as a matter of fact, is related to it. To say this is not to promote contact to the status of a term, which we shall do if we say in

ordinary language "the ground is in contact with the jar", for there is no way of determining whether this is a description of the earlier cognition or of a new cognition. To be put in the technical language using "limiter", "limiting relation", etc. is to emphasize beyond any doubt that it is a description of the earlier cognition. Any relation of any category can function as a relation and also as a tem within the same context. Thus a self-linking term is not a reality of a peculiar type. For every reality can and does function as a relation also, depending on the nature of the other term of that relation. Thus any reality as a locus of any absence will function also as the relation of the absence to it.

(c) Self-linking connector. Navya-Nyāya makes extensive use of the concept of self-linking connector. A construction-filled cognition is defined as a cognition of a relation between the qualificand and the qualifier. Yet it may so happen that in the ontology corresponding to the relation cognized there is no separate reality at all. The question then arises: How can the relation be cognized when there is no relation in reality? The answer is to be found in the Navya-Nyāya theory, already explained, that what is cognized as a relation depends upon the relation of the cognition to what is cognized. Thus it may so happen that one and the same real entity is related to its cognition by two relations, say R and R_3. This real entity will therefore be both the qualificand and also the relation of the cognition. *a*'s being related to the cognition by both R and R_3 becomes the qualificand as well as the relation of the cognition. In the extreme case of identity there is only one real entity which functions in three different capacities in the cognition, since in the ontology there is only one element, call it *a* or *b*, which is related to itself by the relation of identity. Thus the qualificand and the qualifier of this cognition must be the same ontological reality if the cognition is to be true. What is special in Navya-Nyāya is that even the relation of identity is ontologically the same as this reality. Thus there is only one reality which is cognized as the qualificand, the qualifier, and also the relation between them.

In the case of identity an entity *a* functions in cognition as a term and also as one or more of its relations. But according to Navya-Nyāya an entity which functions as its own relation must be cognized under a specific mode for this purpose. For example, when a jar is cognized it becomes the content of this cognition. Now to be an content of a cognition is to be related

to it by a specific relation. Some Navya-Nyāya philosophers hold that this relation of the cognition to its content is not ontologically a separate reality, but is identical with the content itself. This relation is called content-hood (*viṣayatā*). Thus the jar is the content of the cognition which is also the relation of the content to the cognition. To be a relation content-hood has to be cognized under the mode of the higher-order content content-hood-ness. Content-hood under the mode of content-hood-ness becomes the relation between the content and the cognition of it.

Such a relation is denoted by an abstract term formed from a relative term. Thus from "father" we get the relation father-hood, from "son" we get son-hood, from "content" we get content-hood as the relation of a cognition to its content. But though father-hood is ontologically the same as the person who is the father, still the same person when cognized as the relation father-hood is cognized under the higher-order abstract father-hood-ness, and likewise son-hood will be the relation only under the mode son-hood-ness, content-hood under the mode of content-hood-ness, and so on.

To be a self-linking connector (*svarūpasambandha*) is to be (i) an already accepted ontological reality, (ii) under the mode of some property.

For example, counterpositive-ness (*pratiyogitā*) is the same as the counterpositive ontologically and hence is a real entity already admitted in the ontology: it is a self-connecting connector only under the mode of counterpositive-ness (*pratiyogitātva*).

F. The Concept of Cause

According to Viśvanātha, a causal relation is a uniform, temporal relation which does not have any necessity over and above uniformity. A cause is an invariable, immediate antecedent of the effect which is not otherwise established (i.e., is dispensable). This definition involves various features.

(1) The first thing to be noted is that the effect can arise only where the cause is. This means that the effect and the cause must be located in one and the same thing. To be located in an object is simply to be related to it, usually by an occurrence-exacting relation. It is universally assumed in Western philosophy that things are located in space. But in Navya-Nyāya, as "being located" means to be related by an occurrence-exacting relation, location does not always mean

location in space. For example, in the case of a pot which is an effect of two pot-halves (its cause), the whole pot, when produced, will be located in the halves of which it is constituted. The halves again are related to themselves by identity. Thus the halves are in the halves by identity and their effect, the pot, is in the halves by the relation of inherence. The causal relation in such cases being a part-whole relation, it is easy to see that the whole is in the parts, i.e., the parts are where the whole is located. So the effect is located in the cause, the parts, and the cause (the parts) is located in the cause (themselves) by the relation of identity. Hence the cause and the effect are co-present in the same locus. According to Navya-Nyāya there can be no effect of any cause if they are not both located in the same object.

(2) The word "cause" is used in Navya-Nyāya and also in Indian philosophy generally in the sense of what is called a causal condition in traditional Western philosophy. This sense is, however, different from the sense of contemporary writers like Donald Davidson. According to Nyāya there will likely be many causes for any effect. The sum total of all these causes is again a cause in the sense of being a sufficient condition, the totality of all the causal conditions (*kāraṇasāmagrī*).

(3) The causal conditions for the emergence of an effect are, according to Navya-Nyāya, either positive or negative. Positive conditions are those on the presence of which the effect is produced, and on the absence of which the effect is not produced. A negative condition, on the other hand, is that the presence of which prevents or blocks the production of the effect; its absence, therefore, is necessary for the production of the effect. A negative condition, therefore, may be termed a "preventer" (*pratibandhaka*) of the effect. Thus if a preventer is present the effect is prevented from being produced by the positive conditions. In the sum total of causal conditions that is a sufficient condition for the production of the effect, the positive conditions must all be present and all preventers must be absent. Thus the absence of a preventer is a necessary condition for the production of the effect. Navya-Nyāya uses this concept of preventer in various ways, in logic, epistemology, ontology and other fields.

(4) A very special feature of the Navya-Nyāya concepts of cause and effect is that the causal relation cannot be stated as holding between two objects in general. Thus the *definiendum* cannot be simply "x causes y" where x and y stand for any

object whatsoever. According to Navya-Nyāya, whenever we are talking of a causal relation we necessarily understand objects under some specific modes. As one and the same content can be cognized under different modes, the causal relation cannot hold between the objects themselves, but only between objects as cognized under certain specific modes. Thus a fire which has a blue flame may produce smoke. In such a case fire is a positive condition of smoke not as a blue thing but as fire. That is, the cause of smoke is the fire as fire and not fire as a blue thing. So also with the effect. The mode under which alone an object is the cause is called in the technical language of Navya-Nyāya "the limiter of the cause-ness" resident in the object which is the cause. So also the mode under which alone the object is the effect is called "the limiter of the effect-ness" resident in the object which is the effect. Thus, the *definiendum*, according to Navya-Nyāya, will be

x, only as an F, causes y, only as a G.

Here F is the limiting property of cause-ness belonging to x and G is the limiting property of effect-ness belonging to y. This kind of limiting property is neither a cause nor an effect. For example, a stick which moves the potter's wheel is a cause of the jar which is made. But stick-ness, the property of being a stick, is not a cause of the pot. According to Viśvanātha the limiting property of cause-ness is the first type of otherwise-established (*anyathāsiddha*) object The meaning of the term *anyathāsiddha* can be understood only by using the law of parsimony. For example, the stick is related to the two halves of the jar by a relation which is simpler than the relation by which stick-ness is related to them.

The point to be noted here is that this negative condition is to be applied to cases where an object satisfies the condition of being an immediate invariable antecedent to the effect. The negative condition is that the cause must not be otherwise-established or known. *Ākāśa*, for example, is not a cause of a pot, for *ākāśa* is found to be an immediate and invariable antecedent to the pot only as a cause of sound and is, therefore, not also a cause of the pot.

A cause of a cause is not, in general, a cause. This is because the immediate invariable antecedence of the cause of a cause can be discovered by the joint method of agreement and difference only through the immediate invariable antecedence of the cause. For example, the father of a potter is an invariable antecedent of a pot made by the potter, only because he is an

invariable antecedent of the potter who is the cause of the pots. So the potter's father is otherwise established for the pots made by the potter.

An exception to this rule is the cause *par excellence* (*karaṇa*). An operation is the cause of an effect and the cause *par excellence* is a cause of this operation. Thus the cause *par excellence* is a cause of a cause of an effect. Still, the instrumental cause is not otherwise established. Thus, in this special case of a cause *par excellence*, a cause of a cause is also a cause. This can be established by the method of agreement and difference directly. Whenever an effect is produced by an operation, there is always a cause *par excellence*. If the cause *par excellence* is absent, there cannot be any operation, and the effect cannot be produced. So by the joint method the cause *par excellence* is regarded as a cause of the effect.

G. Theory of Causation

The Nyāya theory of causation is that for the production of any effect whatsoever many types of causes must co-operate. One type of cause is a general cause which is necessary for the production of any effect. These are: (1) God's permission, (ii) God's knowledge, (iii) time, (iv) the stock of merit and demerit of individual men. As every effect is a particular effect, there must also be a different type of cause, namely a special cause which accounts for the special feature of each particular effect. That is, general causes are necessary but not sufficient to produce any particular effect. To produce burning, fire is required over and above the general causes.

As God's permission is necessary for the production of any effect whatsoever, all causality involves divine will. Thus so-called natural phenomena like earthquakes, flood, etc. are also caused by God's will. So all causality involves will causality, for divine will is involved in every causation. The other point to be noted is that for the production of the universe, the totality of men's *adṛṣṭa* (i.e., their karmic residue) is necessary as a cause. The world is produced so that beings may enjoy or suffer according to their merit and demerit accumulated through countless births. During the time of dissolution of the world, the *adṛṣṭa* of men remain in their souls, which are eternal and cannot be destroyed. So when the next cycle of creation begins, the *adṛṣṭa* of men becomes a cause of the new creation.

There is also the problem of the plurality of causes. One kind of effect, for example fire, may be produced by different

causes on different occasions. Fire may be produced at different times from dry grass, wood and other kinds of fuel, so also by different types of means, light, lens, flint, etc. Now the theory that one effect may be produced by different causes on different occasions is not accepted by Nyāya and Mīmāṃsā philosophers. The apparently many cases which produce the same effect on different occasions are not really different. They all have the same kind of power (*śakti*) to produce the same effect. This solution is known in Western philosophy as generalization of the cause. Thus one generalized cause produces the same effect. So there is no plurality of causes.

The Nyāya philosophers proceed in a different way to solve this problem. They point out that when different causes seem to produce the same effect on different occasions, there is really a plurality of effects corresponding to the plurality of causes. Thus fire made from dry grass is different from fire made from wood, and so on. This solution is known as specifying the effect in Western philosophy.

Inherence, non-inherence, and instrumental causes

The question arises why three different kinds of causes–inherence- (*samavayī*), non-inherence (*asamavayī*) and instrumental (*nimitta*) causes–have to be admitted. The reduction in number, it may be suggested, can be made in various ways.

(i) The first way is to suggest that the non-inherence- and instrumental causes be identified. This suggestion cannot be accepted for the following reason: contact of the individual threads is the non-inherence cause of a piece of cloth, and the weaver is its instrumental cause. Now even if the weaver dies the piece of cloth continues to exist. But Nyāya accepts the principle that if the non-inherence cause is destroyed so is the substance which is its effect–e.g., if the threads are separated, destroying their contact, the piece of cloth is destroyed. The continued existence of the separate threads cannot cause the cloth to continue to exist. So the non-inherence cause and the instrumental cause cannot be identified.

(ii) Next, it may be suggested that the non-inherence cause can be reduced to the inherence cause, and then there will be only two kinds of causes, inherence and instrumental. But then the question arises: Why does a created substance go out of existence? We have already seen that the destruction of its instrumental cause cannot explain the destruction of the

substance which is its effect, so the proponent of this second way of reduction will have to say that the destruction of the inherence cause produces the destruction of the created substance. If the threads are destroyed, then the piece of cloth which inheres in the threads will also be destroyed. Thus the destruction of the inherence cause is the cause of the destruction of the substance. But this theory too cannot be accepted for it does not apply to all cases. For example, a dyad consists of two atoms which are its inherence cause, for the dyad inheres in its parts, the two atoms. The proponent of this second way of reduction must say that it is the destruction of the two atoms that causes the destruction of the dyad. But as atoms are eternal, they cannot be destroyed and so a dyad cannot be destroyed. This is contrary to fact, for a dyad is destroyed at the time of dissolution when the atoms which are eternal continue to exist by themselves. So this suggestion fails as well.

(3) Then it may be suggested that the inherence cause may be reduced to the non-inherence cause. But this is not possible, for the very definition of "non-inherence cause" is in terms of the inherence cause. If this definition is rejected, then the non-inherence cause as well could not exist independently. For example, the contact of the threads cannot exist apart from the threads. So without the inherence cause the non-inherence cause cannot even exist.

So each of the three kinds of causes has to be admitted.

Singular and General Causation

Ordinarily we establish a general law of causation--e.g., fire is the cause of burning. But the problem is to explain how this general law can be established. In Mill's methods of induction, for example, we have to observe particular instances. Now the problem is: Why do we not establish causal connections between particulars, since the evidence is always of particular instances. According to Nyaya, we can and do establish causal connections between particulars, and we also establish general causal laws. The problem is to explain the relation between cognitions of these two types of causal relations.

According to Nyāya, a causal connection can be established by perception. We perceive certain objects accompanying certain other objects. We have to observe agreement in presence and also agreement in absence of these objects in order to establish a causal connection. Now the Navya-Nyāya

principle, which Gaṅgeśa has formulated, is: The causal connection between particulars is also the general causal connection if, of course, there is no impediment to cognizing the general law.

It may be argued here, that unless a general causal connection is cognized, one cannot cognize the causal connection between particulars. Unless one knows that generally fire is caused by fuel, one cannot cognize that this fire is caused by this fuel.

In contemporary Western philosophy various problems concerning the causal connection between particulars have been raised. Davidson, for example, has raised the question of the logical forms of singular causal statements. He shows that the verb "causes" cannot be regarded in typical cases as a sentential connective, and therefore, not as a truth-functional connective, i.e., neither as a material implication nor as something more than a material implication. A singular causal statement asserts the existence of two particular events related by the causal relation which is to be symbolized by a dyadic predicate.

Then, he raises the question whether singular causal statements are "backed" by causal laws. The problem here is whether we can infer (deduce) the singular causal statement from a causal law and the existence of two events. Davidson concludes that in the great majority of cases singular causal statements are not backed by a causal law. But a causal law is implied by a singular causal statement: "our justification for accepting a singular causal statement is that we have reason to believe an appropriate causal law exists, though we do not know what it is".[1]

In Indian philosophy the problem of the relation between singular causal statements and causal laws is treated in a different way. The relation is not between sentences but between cognitions Though of course cognitions have to be expressed in sentences, still the problem is to find a relation between cognitions, not sentences.

Now, according to Prābhākara Mīmāṃsā a causal connection between particular objects (not events) is to be inferred from the cognition of a general causal law. That is, the

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[1]Donald Davidson, *Essays on Actions and Events* (Oxford: Clarendon Press, 1980), p. 160.

general law has got to be known first. The argument may be explained by an example. Suppose that when a particular pot is produced, the potter's father, who does nothing to produce the pot, sits nearby throughout. Now since the definition of cause applies to an invariable antecedent in the case of the production of the particular pot, the potter's father is "invariably" present, being present throughout. So the question arises whether the potter's father should be regarded as a cause of that particular jar. The usual procedure for eliminating irrelevant (*anyathāsiddha*) factors is to consider other cases of the production of other pots. It is found that the potter's father is not always present in all these cases. Thus to understand part of the very meaning of "cause" as an invariable antecedent it is necessary to consider other cases of particular causation. But when one does that, one does not establish a causal connection between particular objects, but establishes a causal law. Thus, in order to understand what "cause" means in a particular case, it is necessary to establish a causal law, and then one can infer the causal connection between particular objects from the causal law and the existence of the particular objects satisfying the law. So the Prābhākara Mīmāṃsā holds that if in the general case an object is causally irrelevant, then there is no reason to hold that in the case of particular objects the irrelevant object becomes causally necessary. Thus, according to the Prābhākaras, the cognition of the general law is a cause of the cognition of actual connections between particulars. As there cannot be any effect without a cause, so there cannot be cognition of a causal connection between particulars (the effect) without a cognition of the universal law (the cause).

But Nyāya philosophers refute this contention. They point out that causal connection between particular objects may be cognized before a causal law is cognized. For example, a person who has not cognized the general causal law of sticks and jars can cognize a particular connection between this stick and this jar (in constructing an earthen jar, the potter moves the wheel by a stick; hence the stick is a cause of the jar by moving the wheel). Even though one cannot determine whether the potter's father is a cause of the particular jar without considering other cases, still no such consideration is necessary for cognizing the causal connection between the particular stick and the particular jar.

The Prābhākara Mīmāṃsakas then modify their position. They argue that although it is not necessary to cognize the causal law before cognizing a particular causal connection, still the particular causal connection and the general causal law are cognized simultaneously. For the conditions which produce the cognition of the particular causal connection are the same conditions which produce the cognition of the general causal law. As the conditions are the same in both the cases, the cognitions will be produced simultaneously. As a matter of fact we can go further. The cognition of the particular causal connection is also the cognition of the general law. There are not two cognitions. The argument for this modified theory is as follows: When one ascertains pervasion by observing a single instance of co-presence of the pervader and the pervaded, one has the cognition of a special pervasion between, say, a particular instance of fire and a particular instance of smoke. But this cognition is also of the general pervasion between smoke in general and fire in general. If this is not admitted, then it cannot be explained how one can have a cognition of the general pervasion by observing only one instance of co-presence of smoke and fire, since the smoke observed is a particular instance of smoke and the fire a particular instance of fire.

The Nyāya philosophers reject this argument also. They point out that there cannot be a general law that every cognition of a relation between particulars is also a cognition of the general relation. The law is that if one perceives a particular instance, one also perceives the universal of which the particular is an instance. Hence a perception of particulars is also a perception of the universal inhering in the particulars. This, therefore, explains how when one perceives one instance of smoke and one instance of fire going together one cognizes the general relation of pervasion between smoke and fire. But this law does not hold good for inference. When one infers a particular case, one does not cognize a universal in the same inference. The inference of a particular is not an inference of the general case. Hence the law is that when a particular and a universal property are present simultaneously, only then a cognition of the particular is also the cognition of the universal; in other cases, as in inference, where the particular and the universal are not presented simultaneously, a cognition of the particular is not a cognition of the universal.

The Prābhākara Mīmāṃsakas modify their position further. They now assert that from a cognition of a connection among particulars one may infer the general connection. This is exactly the opposite of what they originally proposed. They began with

the assertion that it is the general law which has to be cognized first in order to cognize a particular connection. Now they are asserting that a particular connection is cognized first, and the general law is then inferred from it.

Nyāya philosophers refute even this modified claim. They point out that inference of the general law from a cognition of a connection of particulars is not automatic, but is determined by the purpose of the person concerned. If the person is not interested in the inference, he will not have a cognition of the general law. So there cannot be a universal rule that whenever one has a cognition of a connection of particulars one then infers the general causal law.

Thus, when Gaṅgeśa formulates the law that when one cognizes a causal connection between particulars one cognizes a general causal law if there is no impediment, what he means is that when the particular and the universal are co-present in a locus, then perception of the particular is also perception of the universal. But in other cases the law does not hold, because there is an impediment, i.e., it runs counter to experience.

Thus this Nyāya theory is very different from Davidson's solution that every singular causal statement is backed by a law, although we may not know what that particular law is.

H. Theory of Universals

A universal is that which being eternal inheres in many. The difficulty of understanding this definition stems from the difficulty of understanding the meaning of "many", for according to Navya-Nyāya there are not many things over and above each thing which is not many. The term for "many" is "not-one" (*aneka*), i.e. "different from one". As one-ness is a global property. The difficulty here is in understanding plurality or many-ness, i.e. difference from one-ness.

The first solution is based on the Navya-Nyāya theory of *paryāpti* (numerical) relations and *vyāsajyavṛtti* (relations to pairs, triples, etc.) properties. Here one-ness is a number, and therefore belongs to an object by a numerical relation. The object to which one-ness belongs is the locus of one-ness by *paryāpti*. The limiter of locus-ness resident in this object is one-ness. Both-ness, being a *vyāsajyavṛtti* property (here, being a property of pairs), belongs to two things, but not to each of the two things which are its locus. Thus the two things taken together are the locus of both-ness which is the limiter of this locus-ness. Thus both-ness is not the limiter of the locus-ness of

one-ness, which belongs to each thing taken separately. In this locus of both-ness there will be difference from one-ness, for both will not be one, will be different from one.

But there is a difficulty with this solution. Locus-ness limited by both-ness is resident in both the objects where difference-from- one-ness is said to reside. But one-ness resides in each of the two objects which constitute the locus of both-ness. Now some Navya-Nyāya philosophers accept the rule that the locus of *vyāsajyavṛtti* properties cannot be the locus of difference of any property which resides partly in the locus. As one-ness resides in each object, it resides in part of the locus of both-ness. So the rule stipulates that there cannot be any difference-from- one-ness resident in this locus.

The reply to this objection is simply to deny the validity of this rule. It is corroborated by everyone's experience that two are not one. So, also, even though smell belongs to earth, it does not belong to both earth and water, because it does not belong to water.

Here is an objection to this reply: Let it be granted that both are the locus of difference-from-one-ness, i.e., both are different from one. But because Navya-Nyāya does not ascribe any ontological status to collections, both objects are ontologically single objects. In Navya-Nyāya terminology both are not something over and above (*atirikta*) each. So what is present in each will have to present in both, for example, color present in each of two water atoms will also be present in both atoms. So the rule that what belongs to one does not belong to both is invalid.

The point may be explained as follows: The Navya-Nyāya philosophers who accept the validity of the rule give examples of negation of both. This negation is true only in the following three cases (where A and B are the properties concerned):

(i) Where A is present but B is absent there is negation of both A and B.

(ii) Where B is present but A is absent there is negation of both A and B.

(iii) Where A is absent and B is absent there is negation of both A and B.

Now the objection is that one possibility is left out here, namely

(iv) Where A is present and B is also present.

In such a case we cannot say that there is negation of both A and B.

The point is that if both A and B could be something over and above the two separately, then even if A and B were severally present we could have said that both are not present or that both are not one. But as Navya-Nyāya does not admit a separate ontological reality of both over and above the two separately and individually, it is difficult to see in what way both are different from each.

The solution to this difficulty, as suggested by Dinakāra, is that the term "not-one" means that which has a number other than unity, as there are infinite numbers other than one. It is not difficult to make sense of things other than one, i.e. many things, as things possessing a number other than one. So a universal is that which inhere in many objects, i.e. objects which are more than one in number.

I. Theory of Abstraction

Navya-Nyāya uses abstracts, often of higher orders, for various purposes. We shall explain here (1) the Navya-Nyāya technique of forming abstracts, (2) their meaning, (3) abstracts of compound words, (4) higher order abstracts, their meaning, reasons for admitting them, and their ontological status.

(1) Technique of Forming Abstracts

Ordinarily, in natural languages and also in Sanskrit, abstract nouns are formed from concrete terms (common nouns, adjectives, verbs) and concrete terms are formed from abstract terms. Thus given the concrete terms

man, black, wise, move

we form the abstract terms

humanity, black-ness, wisdom, movement

by adding various abstraction suffixes to the given concrete terms with grammatical changes in them where necessary.

In the technical language of Navya-Nyāya, as also in Indian philosophy in general, one suffix "*-tva*" (or its grammatical variant "*-tā*") is uniformly used to form abstract terms from nouns and adjectives. We shall translate this suffix as "-ness". Thus we shall use

man-ness, black-ness, wise-ness.

Similarly, from the abstract terms

beauty, health, anger

we form the concrete terms

beautiful, healthy, angry.

Navya-Nyāya uses the concretion suffix "*-vat*" (or its

grammatical variant "*-mat*") which we shall translate as "-possessing". So we shall have

beauty-possessing, health-possessing, anger-possessing.

In ordinary language we cannot generally form an abstract term from an abstract term, or a concrete term from a concrete term. Navya-Nyāya, however, forms abstract and concrete terms from any term. This involves construction of higher-order abstract and concrete terms. In languages like English second-order concrete terms are formed and used more often than second-order abstract terms. Thus from

tear, blue-eye

we have second-order concrete terms

tearful, blue-eyed,

which we shall translate as

tear-possessing, blue-eye-possessing.

Abstraction and concretion are inverse processes. If we form a concrete term from an abstract term, again from this concrete term we get back the original abstract term. Thus "healthful-ness" is just "health". Yet in ordinary language in order to justify this circumlocution a difference in meaning is usually implied: thus "healthful-ness" and "health" need not mean exactly the same thing. In the technical language of mathematics and logic, as of Navya-Nyāya, no difference in meaning is implied. So we have the following two rules of inverses:

Inv. 1 (*t-tva*)*-vat* = *t*; *t*-ness-possessing = *t*.

Inv. 2 (*t-vat*)*-tva* = *t*; t-possessing-ness = *t*,

where *t* is any term.

It will be interesting to compare and contrast this Navya-Nyāya technique of forming abstract terms with the techniques of contemporary logic. Usually three methods are used in different systems of logic.

Method A. In this method an abstract term is formed from a sentence. Thus from "Mars contains life" we have the abstract

(Mars/[Mars contains life])

which means 'the attribute of containing life".[1]

Method B. In this method an abstract term is formed from a sentential function. Thus we get the same attribute from "x contains life" by prefixing the *lambda*-operator

($lambda_x$) (*x* contains life).

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[1]F. B. Fitch, *Symbolic Logic* (New York: Ronald Press, 1952), p. 94

In this type of logic containing variables, the abstraction operator must bind the relevant variable, which has the effect of deleting the variable from the expression which becomes an abstract term. Hence we have the following identity[1]:

$$(\mathit{lambda}_x)\ Fx = F.$$

Method C. This method is to use the *lambda* operator to form an abstract term from a term. Usually it is a term denoting the value of a function for an indefinite argument *x*, thus: $(\mathit{lambda}_x)\ fx = f$. Patrick Suppes, for example, gives the general formulation of abstraction (with respect to *v*) thus:

"If *v* is any variable and *psi* any term, then (lambda_x)(psi) designates the function whose value for *x* is a member of *v* is designated by the result of substituting a symbol designating *x* for *v* in psi."[2]

Although the Navya-Nyaya technique of forming abstract terms from terms is similar in this respect to method C, yet this similarity is only superficial. According to Navya-Nyāya concrete terms designate objects possessing attributes or properties. Now "possessing" stands for different relations in different contexts. Thus the two terms "healthy" and "wealthy" are similar in grammatical structure, yet when translated into the Navya-Nyāya terminology they mean entirely different types of relations. The corresponding Navya-Nyāya terms "health-possessing" and "wealth-possessing", when fully expanded, reveal the difference in meaning. A health-possessing person is a person who enjoys good health, a wealth-possessing person is a person is the legal owner of wealth which he may not actually be enjoying it. Thus "wealth-possessing" denotes a person who has to be related to wealth by the relation of legal ownership. We may, therefore, say that

(lambda_x)(*x* is the legal owner of wealth) is the same property as wealth-possessing-ness.

Yet the Navya-Nyāya technique is different from Method B, because of a peculiarity of the Navya-Nyāya concept of relation. A dyadic relational expression in Western logic is a dyadic predicate which forms a sentence from two names, but

[1]Rudolf Carnap, *Introduction to Symbolic Logic* (New York: Dover Publications, 1958), p 133.

[2]Patrick Suppes, *Introduction to Logic* (fourth printing). (Princeton, New Jersy: D. Van Nostrand Company, Inc., 1957,), p. 243.

according to Navya-Nyāya it forms a compound term. Thus "aRb" is not the sentence "a is related to b by R", but is the compound term "a as related to b by R". As a matter of fact, all expressions which are sentences grammatically are interpreted in Navya-Nyāya as compound terms meaning qualified objects. the difference in meaning between a single word and a grammatical sentence is only a matter of degree of complexity of the qualified-ness of the object. "Wealth-possessing" refers to anyone who is presented under the mode of legal ownership of wealth but is otherwise not known. But to say that a merchant is wealth-possessing is to have an individual presented first under the mode of being a merchant, and then, again, under the mode of legal ownership of wealth. This difference may be explained by the difference between

(Ex)(Wx)

and

(Ex) (Mx.Wx.)

where "E" is Hilbert's exposition operator. We begin with a quotation from Mill:

"A concrete name is a name which stands for a thing; an abstract name which stands for an attribute of a thing....It may be objected to our definition of an abstract name that not only the names which we have called abstract, but adjectives, which we have placed in the concrete class, are names of attributes; that white, for example, is as much the name of the color as white-ness is....(But) when we say snow is white, milk is white, linen is white, we do not mean it to be understood that snow or linen or milk is a color. We mean that they are things having color. The reverse is the case with the word white-; what we affirm to be white-ness is not snow, but the color of snow. White-ness, therefore, is the name of all things whatever having the color....It is true that this name was given to all those various objects on account of the quality....."[1]

Thus according to Mill a term like "whiteness" means (is a name of) the color exclusively. It is obvious that this color does not exist independently of the things which have this color. Thus from the point of view of existence the quality is dependent on the thing. Yet this does not mean that the quality is, therefore,

[1]John Stuart Mill, *A System of Logic*. (Eighth edition. New York: Harper & Brothers Publishers, 1900), pp. 33-34

subjective; what is objectively real is the thing having the quality, i.e., the thing-with-the-quality. So far as the application of the concrete term "white" is concerned, Mill holds that it is applied to white objects "on account of" the quality, i.e. that the reason for application of this word to whatever it applies to is the color white-ness. Thus there are two different, and to some extent opposite, types of considerations–existential and semantic. Existentially it is the thing which is primary, but semantically it is the quality which is primary.

To explain how an abstract term can apply to a quality exclusively we have to assume that the object on which the quality is existentially dependent, and from which it cannot be ontologically separated, has to be ignored semantically, left out of the sphere of reference of the abstract term. This may be regarded as the meaning of "abstraction", the process involved in the construction of abstract terms from concrete terms. This does not mean that there is an ontological separation of the quality from whatever things may possess it. To explain what a term refers to it is not necessary to postulate that its referents have reality separated, as opposed to epistemically distinguished, from all other objects; what is necessary is to assume that we can attend to, can cognize, this aspect of a complex entity which may, and does, have many other aspects.

The techniques of abstraction adopted by Western logicians involve merely deletion of variables or even names from sentential functions, or sentences and terms. This merely linguistic procedure has, of course, its semantic counterpart, for we can always ask what such abstract terms mean. Fitch, for example, says "Let *p* be any proposition and let *a* be something mentioned by the proposition *p*. Then there is some attribute which *p* assigns to *a*. We will designate this attribute by the notion (*a*/*p*)."[1]

According to Navya-Nyāya, the property (Fitch terms it an "attribute") which an abstract term designates is the property which is the sufficient condition for application of the corresponding concrete term to its referents. Thus white-ness designated by "white-ness" is the reason for applying the concrete term "white" to whatever it applies to. Navya-Nyāya philosophers also hold that the abstract property designated by the abstract term formed from a concrete term is the being-so-

[1] Fitch, op. cit., p. 94.

and-so (*bhāva*) of the referents of the concrete term. Thus wise-ness (wisdom) is being wise and so on. Thus here, too, there are two sorts of consideration–ontological and semantic. "Wise-ness" refers to a property by virtue of which the wise are wise. This fact is the reason why this property is the sufficient reason for application of the word "wise" to all and only those who are wise.

(2) Abstracts of Compound Words

We have already stated that Navya-Nyāya does not distinguish between sentences and compound words. Hence abstracts formed from compound words will correspond to abstracts from sentences in Western logic. According to Yajñapati Upādhyāya, an outstanding Navya-Nyāya philosopher,[1] there is difference in meaning between abstracts of the same compound terms. Moreover, according to him, compound terms formed in different ways may yield abstracts which may be syntactically similar, yet their meanings are different. For example, we may form two different compound words from the simple words "blue" and "lotus"–(i) "a blue lotus" (*nīlotpalaṃ*), (ii) "blue-and-lotus" (*nīlotpale*), where (i) is the result of a noun-adjective compound (*karmadhārayasamāsa*). Although these terms are syntactically different, (i) having singular number, while (ii) has dual number–still the abstract terms formed from them have the same syntactical form–"blue-lotus-ness" (*nīlotpalatva*). Yajñapati argues that in spite of this syntactical identity, the abstract terms have to be interpreted differently to mean different things in the two cases. The difference between (i) and (ii) may be explained thus:

(1) (membership$_x$)(Bx.Lx)

(ii) (membership$_x$)(Bx).(membership$_x$)(Lx)

The corresponding abstract terms will be

(i*) (*lambda*$_x$) (Bx. Lx) and

(ii*) (*lambda*$_x$)(Bx) . (*lambda*$_x$) (Lx).

Now (1*) cannot be identified with

(i**) B b L (using the identity (*lambda*$_x$)(Fx = F)

for then (ii*) also will be the same (ii*) B b L, and the difference between (i) and (ii) will be lost.

According to Yajñapati, "blue-lotus-ness" will mean in case

[1] See EnInPh Volume VI, pp. 473-486.

(i) the co-presence of blue-ness (blue-color) and lotus-ness, i.e. blue-ness must belong to that to which lotus-ness belongs. This follows from the fact that in (i*) the two occurrences of "x" in "(Bx) . Lx)" are within the scope of the single abstraction operator, showing that the two occurrences of "x" within its scope must have the same value, whereas different values are permissible–and according to Sanskrit grammar, necessary–for them in (ii*). Yajñapati's theory of co-presence blue-ness with lotus-ness, or conversely, co-presence of lotus-ness with blue-ness, brings out this feature of (i*). For, (i*) must be applied to one value

(i***) [(lambda_x) Bx. Lx) (a)] = (Ba.La),

(ii*) to two values

(ii***)(lambda_x)[(Bx)(a) . (lambda_x)(Lx)(b)} = (Ba.Lb)

where according to Sanskrit grammar, a must be different from b.

Thus Yajñapati's pont is that "(lambda_x)(Bx . Lx)" will mean something more than "(lambda_x) (Bx)" and (lambda_x) (Lx)" separately–B and L, blue-ness and lotus-ness, must also belong to one and the same object.

(3) Higher Order Abstracts

We have already stated that according to Navya-Nyāya we can form an abstract term or a concrete term as we please from any given tem. Thus if t be any term, then we may form the abstract term "t-ness", or the concrete term "t-possessing". Again from the first-order abstract "t-ness" we may form a higher-order abstract "t-ness-ness", and from the first order concrete term "t-possessing" we may form the second-order term "t-possessing-possessing". The problem here is to explain the meaning of higher-order abstract and concrete terms, and the Navya-Naiyāyika's reasons for admitting them.

We have already seen that in a natural language like English we often have second-order concrete terms like "blue-eyed", although the higher-order abstract terms are rarely if at all formed. Yet a second order concrete term logically implies a second-order abstract term. Thus from "blue-eyed" we get the first-order abstract "blue-eyed-ness", which is just "blue-eye", "(lambda_x) (x is blue-eyed)" is "blue-eye". From this first-order abstract we may get the second-order abstract "blue-eyed-ness", i.e., "(lambda_x) (x is a blue eye)", which according to Yajñapati means the co-presence of blue-ness and the property being an eye. Navya-Nyāya, however, has the general problem of

explaining the meaning of, and need for, higher-order abstract and concrete terms. We shall explain the Navya-Nyāya theory by distinguishing between different types of cases.

Case 1. This is the case of abstract terms formed from adjectives of color, taste, etc. Taking Mill's example of "whiteness" as an abstract term formed from the adjective "white" we can explain why Navya-Nyāya forms higher-order abstracts. According to Navya-Nyāya, although the adjective "white" denotes all things which are white, still "white-ness" does not denote a single property present in all white things. The theory is that the color of a particular object belongs to it and is causally dependent upon it. Thus colors, like tastes, sounds, etc. are all as particular as the things to which they belong. According to Navya-Nyāya, colors, etc. are qualities of substances, and the distinction between substance and quality is not the same as that between a particular and a universal. The white colors belonging to different white objects may, and do, have something common to them all, which is a universal white(-color)-ness. It is the different white colors that are the instances of the universal of white(-color)-ness. Thus according to Nyāya, the first-order abstract term "white-ness" denotes innumerable particular qualities and the second-order abstract term "white-ness-ness" denotes the universal of which the particular white colors are the instances. This shows that according to Nyāya an abstract term which denotes a quality or a property "exclusively" (as Mill says) does not necessarily denote a universal. A universal can be denoted only by a second-order abstract term in such cases.

Case 2. This is the case of general terms from which second-order abstracts are formed. Take, for example, the word "cow" from which we form the first-order abstract "cow-ness", which term designates the universal which inheres in all and only cows; therefore, cow-ness has the property of inhering in all and only cows. And this is the property of cow-ness, which the second-order abstract term "cow-ness-ness" designates.

Now, comparing the two abstract terms, "cow-ness" and "cow-ness-ness", we find they designate objects which are very different ontologically. Cow-ness is a simple property inhering in all and only cows. It is a simple, unanalyzable, repeatable property which collects all and only cows into one class. But cow-ness-ness, although an abstract property of cow-ness, is itself not a single unanalyzable property which can collect different individuals into one class. For one thing, cow-ness-

ness is the property of a single abstract entity, cow-ness, and hence, by the very nature of the case, cannot be present in many. For another thing, cow-ness-ness is not an unanalyzable property, involving as it does a relation (inherence) and its term. Thirdly, while cow-ness is a light property (*laghu dharma*), cow-ness-ness involves reference to all individual cows which are the second term of the relation of inherence, and cow-ness-ness is defined as the property of being the first term of this relation. Using Fitch's notation we may represent this second-order abstract term as "cow-ness 1 (cow-ness inheres in all and only cows)", which denotes the property of being the first term of the inherence. (As the Nyāya concept of *samavāya* is inherence, cow-ness-ness is the property of being the first term of inherence (*samavāya*), viz. *samavetatva*, in all and only cows. Fourthly, it is clear that cow-ness-ness, being conceptually heavy and hence analyzable, cannot be an eternal entity. No composite object can be eternal according to Nyāya.

For these reasons Navya-Nyāya does not regard cow-ness-ness as an ontological entity of a different sort. It has, therefore, to be reduced to other types of reals admitted by Navya-Nyāya. As a matter of fact cow-ness-ness is identified ontologically with the physical form of individual cows, which differs from individual cow to individual cow. According to Navya-Nyāya the physical form of an individual cow is the arrangement of its limbs, which are particular as the cow itself is. Thus the formation of higher-order abstracts does not lead to an infinite progression of abstract properties in ontology.

Case 3. It is necessary to keep in mind the Navya-Nyāya theory of abstract terms formed from proper names and from names of single ontological entities like space and time. Abstract terms formed from such terms, "space-ness" and "time-ness" cannot, from the nature of the case, designate a property common to many, and therefore cannot represent universals according to Navya-Nyāya. What, then, is the ontological status of these entities? According to Navya-Nyāya these abstract properties are ontologically identical with the objects designated by "space", "time", etc. In such cases, the abstract properties–being space, being time–are ontologically the same as space and time respectively. It is only in epistemology and semantics that the distinction between space and space-ness, time and time-ness, is made. It is a fundamental theory of Navya-Nyāya that one and the same ontological entity can function as two different terms in the cognition of the entity.

Every construction-filled cognition must have a qualificand, a qualifier and a relation as elements in the structure cognized. Yet corresponding to the three elements of the cognized structure there need not be three different elements in ontology. In the extreme case, one single ontological reality may function in the cognized structure, as both the terms and also their relation. Thus in the cognition "this (jar) is identical with itself", the identity relation as well as its two terms are ontologically identical with a single object, this jar. Even though the cognized structure does not have one-to-one correspondence with what there is, still, in such cases, the cognition is not false, for everything has the property of self-identity. Relations as well as properties are, according to Navya-Nyāya, elements in cognized structures, but need not be, for that reason, ontological reals.

According to Navya-Nyāya, one cognition, which is a conscious state, is related by three different characteristic relations, c-R_1, c-R_2, and c-R_3; and in extreme cases like self-identity, there is one single ontological real to which the cognition bears all these three relations. So, O (the ontological reality), as the second term of c-R_1, is the qualificand of the cognition "O is identical with O"; as the second term of c-R_3, is the relation, identity; and as the second term of c-R_2, is the qualifier, which is the first term of all these three relations in the cognition. Thus one cognition being related to one ontological real in three different ways is of a related structure, a-R-b. Such a cognition is not false, for the cognition is related in three ways to the real which therefore is cognized as a relational whole. A cognition is false if the cognition is related to elements which are not so related really. When in reality a is not related by R to b, but is cognized as such, then the cognition is false.

Case 4. Now we come to a different type of case, viz. abstract terms formed from relation words and relative terms. Take, for example, the abstract term "content-hood". A content is a content of a cognition. Thus the abstract term "content-hood" may be expressed in symbols thus:

OB. S. (x)(s is a content of a cognition of x which has the property of being the content of its own cognition)

Now the question is about the ontological status of such a relative property. According to Navya-Nyāya, such relative properties are regarded as relations of a special type, called "self-linking connector" (*svarupasambandha*). We have already

explained how Navya-Nyāya forms such a relation by abstraction on the predecessor of a relation. Thus the property content-hood is really a relation with the content as the predecessor and its cognition as the successor. Thus content-hood is the relation of the cognition to the content. This relation, being a self-linking connector, is ontologically identical with one or the other of its terms. The usual Navya-Nyāya theory is to identify content-hood with its successor, the cognition. It is the very nature of cognition to be related to, to be of, its content ontologically; there is no reality between content and cognition which serves as their relation. Yet the expressions "cognition of a content" and "the content of a cognition" unmistakably indicate a relation between a content and a cognition. Navya-Nyāya uses the concept of self-linking connector to justify a sort of reductionism in ontology. But this leads to the consequence that the content-hood of a particular cognition is ontologically identical with the specific content of that cognition, and will vary from content to content and also from cognition to cognition. Thus if a particular jar be the content of a particular cognition at a particular time, the content-hood will be identified ontologically with that particular cognition. But if the same jar be cognized again, the content-hood of this cognition will be different from the content-hood of the earlier cognition, because the cognitions are different ontologically as distinct particular occurrences. So also a cognition of a jar is different ontologically from a cognition of a piece of cloth, and hence the content-nesses of these two contents are ontologically different. As a self-linking connector is ontologically a term which is also a relation, it will be a particular when this term is a particular, and a universal when it is a universal. Thus although all self-linking connectors are expressed in language by abstract terms formed from the predecessors of the relational expressions, still such abstract terms do not necessarily mean universals.

Higher-order abstracts are necessary in Navya-Nyāya to explain the meaning of first-order abstract terms. According to the Navya-Nyāya theory of meaning, a word presents a content only under a specific mode of presentation. This mode of presentation must be the property of being that content. Thus a general term like "man" presents individual men under the specific mode of being a man, i.e., humanity. Now when we use the word "humanity" this word must also present its content, humanity, under a specific mode which is being humanity or humanity-ness. Now if we use the term "humanity-ness", this also presents its object humanity-ness under a specific mode which is being humanity-ness, i.e., humanity-ness-ness, and so on. Thus there is a progression of abstract terms of higher and higher orders. In ontology, however, sometimes abstract terms designate real entities different from those designated by the term from which the abstract term is composed by the addition of the abstraction-suffix–i.e., the arguments of the abstraction operator. But in other cases the entities meant by the abstract terms are ontologically identical with the entities meant by their arguments.

The main stream of Navya-Nyāya philosophers admit into their ontology universals as reals, although they impose rather restrictive conditions on abstract properties for being admitted as universal properties. Those abstract properties which fail to satisfy these conditions are identified, by various methods, with entities already admitted into the ontology. This admission of "genuine" universals as ontologically real abstract properties marks these philosophers off from the Buddhist nominalists. But the main stream of Navya-Nyāya philosophers accept nominalism in the case of a rather large number of abstracts which do not fulfil the conditions of being universals. Thus the main stream of Navya-Nyāya philosophers attempts a sort of compromise between the extreme nominalism of the Buddhists and the extreme realism of a section of Navya-Nyāya philosophers.

This latter section of Nyāya philosophers advocates an uncompromising realism in ontology. Raghunātha Śiromaṇi, for example, suggests the alternative of regarding abstract properties as being the first term of a relation (*anuyogitā*), being the second tem of a relation (*pratiyogitā*), or separate ontological entities. Raghunātha could make this suggestion because Nyāya, whether old or new, is essentially a logic and an epistemology, leaving its ontology quite open. According to Nyāya philosophers, logic and epistemology can be developed independently of ontological questions, which are primarily the concern of the allied school of Vaiśeṣika, which is often taken to supplement the Nyāya theories of logic and epistemology.

J. Theory of Definition

A theory of definition is very important for Navya-Nyāya, for it uses definitions extensively in ontology, epistemology, logic, psychology, etc. Framing and using definitions extensively

distinguishes Navya-Nyāya nor merely from other schools of Indian philosophy but also from older Nyāya. We shall explain here some features of this theory of definition.

At the outset it must be emphasized that definitions in Indian philosophy in general and Navya-Nyāya in particular are conceived very differently from definitions in Western philosophy. In Western philosophy and logic it is usual to define a term, i.e., a linguistic expression. A definition in this sense explicates the meaning of the expression. In modern Western logic, however, definitions do not explicate the meaning of the terms defined but are mere abbreviations. In India, definitions in the sense of abbreviations were regularly used in grammar from the earliest times, as in Pāṇini. In Indian philosophy, however, definitions are not conceived as abbreviations. To start with, there are contents collected by some common features, which features may or may not be independent ontological realities, *jātis* in the sense of Nyāya. These common features are again conceived as modes under which the contents to be collected are cognized. Then there is the process of finding another set of features, properties or marks, which are present in all and only those contents which have been previously collected together in a class as cognized under some mode. The process of finding these properties or marks is called defining in Nyāya. As this concept of definition is completely different from the Western concept, I shall use "define*", "definition*", etc. (with an asterisk) to distinguish the Navya-Nyāya concepts from the Western concepts.

Thus in the Navya-Nyāya theory of definition* there are two states: (i) there must be contents to be defined* which must all be cognized under one mode; (ii) the definition* of these contents is a property co-extensive with this mode and which is called "a defining* mark" of these contents. The mode under which the contents to be defined are cognized is called "the limiter of (the property) of being the contents to be defined" (*lakṣyatāvacchedaka*). The defining* marks are called definitions* (*lakṣana*).

Now the set of properties under the mode of which the contents to be defined* are cognized must be, for that very reason, present in all and only those contents. The definition, too, must be a set of properties present in all and only the contents to be defined*. Thus these two properties must be co-extensive. Yet the first set of properties cannot constitute the defining* mark. For example, if all and only pots be the contents to be defined* then they are fixed under the mode of pot-ness, which is a universal. Yet pot-ness, again, cannot be used as the defining* mark of all and only those contents which have been fixed for definition* under this very mode of pot-ness. Thus the defining* mark has to be different from the limiting property (limiter of being the contents to be defined*) although the two have to be co-extensive.

That two co-extensive properties have thus to be different shows that the Navya-Nyāya concept of definition* is essentially an epistemic concept being defined in terms of "cognition", "modes of cognition", etc. This epistemic nature of Navya-Nyāya definitions* will become clear as we proceed. In ontology, i.e. outside epistemic contexts, Navya-Nyāya uses the law of extensionality to identify two co-extensive properties. Navya-Nyāya is thus extensional in ontology but has to be intensional in epistemic contexts.

(1) The First Type of Definition*

Two different types of definition* are admitted in Navya-Nyāya corresponding to two different purposes for which defining* marks of contents are determined. The first purpose for finding a defining* mark of contents collected under a mode is to find a mark by which all of those contents can be distinguished from everything else. Thus the defining* mark is different from everything else. This inference has to be for the sake of others, for according to Navya-Nyāya the defining* mark, M, is used to prove to others that it excludes the contents to be defined (Ps) from every non-P. This proof which takes the form of an inference for the sake of others has to be put in the only-negative form (*kevalavyatirekin*)

Inf. 1: Thesis: (All and only) Ps are different from everything else;
Reason: Because they have M.
Example: (with negative pervasion) Whatever is not different from everything other than Ps does not have M, such as Qs (other than Ps).
Application: (All and only) Ps have M.
Conclusion: (All and only) Ps are different from everything other than a P.

Now there is a difference between the Nyāya philosophers of the old and the new schools on the nature of the application (*upanaya*). We shall follow the theory of the Nyāya philosophers of the old school here to explain why a positive

inference of this form is impossible. We shall try to present Inf. 1* in the form of inference for the sake of others thus:

Inf 1*:Thesis (All and only) Ps are different from everything else;

Reason: Because they have M.

Example: (with affirmative pervasion) Whatever has M is different from everything other than a P

Application: (All and only) Ps have M.

Conclusion: (All and only) Ps are different from everything other than a P.

The impossibility of this inference is due to the Navya-Nyāya theory of the nature of a valid reason. In a positive inference the *hetu* must be present in an instance (a P) where the *sādhya* is known to be present. In a positive inference, in the technical language of Navya-Nyāya, the *hetu* must be present in at least one *sapakṣa*. Yet in Inf 1* a *sapakṣa* is impossible, for the *sādhya* can be present only in the *pakṣa* (the subject of the application): difference from non-P can be present only in Ps. But the *pakṣa* is where the *sādhya* is yet to be proved, and is not known to be a locus of the *sādhya* before the conclusion is proved. As there cannot be any instance other than the *pakṣa* where the *sādhya* is known to present, the possibility of a *sapakṣa* in this case is ruled out. What can be done is to find instances where the *sādhya* is not present and to show that the *hetu* is also not present there. So there can only be negative pervasion in this case.

There is another point to be noted about Inf. 1. In Western logic it is usual to regard "p is not non-p" as logically true, taking it to be a tautology which follows from any premiss whatsoever. But, according to Nyaya, this is not the case. A sentence of the form "P is not non-P" requires proof as much as any true sentence.

Inf.1 also explains why the defining* mark, which must be co-extensive with P-ness (the limiting property of being an object to be defined*) has yet to be different from P-ness. As a matter of fact, a defining* mark is often defined as a property co-extensive with but different from the limiting property of being an object to be defined*. If we try to frame an inference for the sake of others corresponding to Inf. 1 with M identical with P-ness then the application (step 4) becomes impossible. For it would have to be the unmeaning string of words "(All and only) Ps are Ps". According to Navya-Nyāya, a sentence in which the limiting property of being the subject is the same as the predicate, or as the same limiting property as the predicate, fails to be significant, and therefore if M and P-ness are identified then "P has M" becomes "P has P-ness", i.e., "P is P", which does not convey any sense at all. Thus M has to be different from P-ness even though it has also to be co-extensive with P-ness.

This Navya-Nyāya condition on sentence-meaning has an important consequence. No analytic statement in which the predicate is part of the subject concept can ever be significant, according to Navya-Nyāya. The argument is that there is no point in making a statement of this sort, for it conveys no information at all. This does not, however, mean that there cannot be an analytic judgment as a form of cognition. One may very well cognize that A is A, but it will be pointless to make the statement that A is A.

This also explains why definitions* in Navya-Nyāya are non-extensional. A definition*, i.e. a defining* mark, of this first type has to be used as a *hetu* in an inference which, according to Nyāya, is a kind of cognition. Thus a defining* mark of this type is necessarily to be understood only in an epistemic context. We shall see later that this is true of the other type of definition* also. Thus two properties which may be co-extensive are not identified in definitions* in which the limiter of being objects to be defined* is the limiter of P-ness of an inference, and the defining* mark the *hetu*.

As M (the defining mark) is to be used as a *hetu* in a valid inference, it must satisfy all the conditions of a valid reason. A defining* mark may fail to be the *hetu* in a valid reason in three ways:

(a) If the defining* mark fails to be present in any P then the application (step 4) will be false, rendering the inference invalid. This defect of M is technically called "the impossibility of M" (*asambhava*).

(b) If M fails to be present in all Ps but is present in some, then the defining* mark suffers from the defect of being too narrow (*avyāpti*).

d) If M be present in all Ps but is also present in other objects, then too M is a defective *hetu* and the defect is technically called "being too wide" (*ativyāpti*).

These three defects of a defining* mark--impossibility, being too narrow and being too wide--are really defects in the defining* mark used as a *hetu* for proving the exclusion of the objects to be defined from everything else. A good *hetu* has to

be present in all the *pakṣa*(s) of the inference. So if the M fails to be present in any of the *pakṣa*(s) it becomes a defective *hetu* called *svarūpāsiddha*. If the M is present in some loci but is not present in all then it becomes a defective *hetu* called *bhāgāsiddha*. If the *hetu* is present in objects where the *sādhya* is not present, then the *hetu* becomes defective and is called *anaikāntika*. These three defects of a *hetu* are the causes of the corresponding defects of the defining* mark.

An example of a too wide defining* mark:

1. Thesis: Jars are different from non-jars.
2. Reason: Because they possess qualities.
3. Example: Whatever is not different from non-jars does not possess qualities.

In this example the pervasion is defective because, say, a piece of cloth, which is not different from non-jars, still possesses qualities. It is a locus of the *hetu* (qualities) and still is the locus of the absence of the *sādhya* (difference from non-jars). This defect of the *hetu* is called *anaikāntikatva*. This shows that the defining* mark, that of possession of qualities, being present in things other than jars, is not sufficient to distinguish jars from non-jars.

If the defining* mark is too narrow, then it too cannot be a valid *hetu* for inferring that the objects defined* are different from everything else, because the defining* property will not be present in all objects to be defined* but only in some. As the objects to be defined* are the *pakṣa* of the inference and the defining* mark is the *hetu*, the non-presence of the *hetu* in the whole of the *pakṣa* involves the fallacy of *bhāgāsiddha*. This fallacy is committed if we define* jars as having blue color. The inference here will be of the following form:

1. Thesis: Jars are different from non-jars.
2. Reason: Because they possess blue color.
3. Example: Whatever possesses blue color is different from non-jars.

Here (2) the reason is invalid, because all jars are not blue jars, so the *hetu* (possessing blue color) is not present in all the *pakṣas* and is therefore invalid.

The *hetu* here is also too wide, because everything blue is not a non-jar. This shows that one defining* mark may be defective in both ways, being to narrow and too wide at the same time. Such defining* marks are, therefore, cases of the defect of cross-classification. Now according to Navya-Nyāya philosophers such instances, which can be classified as being defective in both ways, do not mean that the two properties–being too narrow and being too wide–are themselves overlapping. The rule here is: Even though there are instances which can be put in two classes, the class properties themselves are not overlapping if the class properties are imposed properties, i.e., are not universals (*jāti*). Thus there is a fundamental difference between defining* and classifying objects by means of universals, which are roughly essential properties of natural kinds, and defining* and classifying objects by means of imposed properties, which do not have independent ontological reality. If a defining* mark is (supposed to be) a universal and there are instances which are instances of two different properties, that shows that these (supposed) universals cannot really be both of them universals. One of them at least must be an imposed property.

But if there is an instance which has two imposed properties neither of which is subordinate to the other, this does not mean that at least one of the imposed properties is not an imposed property at all. This difference between universals and imposed properties is due to the facts that universals themselves are real and that they sort out real objects into real classes. Imposed properties, however, do not have a reality of their own, but are reduced to other ontological reals and, hence, do not give rise to any ontological difficulty even if they overlap. Two universals cannot overlap unless one is subordinate to the other in the sense that the set of instances of the one is a proper subset of that of the other. There can be no intersection unless one is a proper subset of the other. In the case of imposed properties, however, this rule does not hold good. One and the same object may belong to the two sets of objects classified by these imposed properties without harming the imposed properties themselves. According to Navya-Nyāya, it is only in the case of an imposed property that there can be an overlap with impunity. As the properties of being too wide and being too narrow are not universals they do not lead to classification of natural kinds. For a definition can be too narrow as well as being too wide.

In this first type of definition* the defining* mark, M, must be different from and co-extensive with P-ness. Navya-Nyāya also condemns any vicious circle in definition* when two-defining* marks are compared. In such a case, one of the defining* marks has to be rejected, though the other may be retained. This preference for one of the two defining* marks is

often based on other considerations, ontological, epistemic, etc.

The defining* marks (M), and the exclusion of the objects to be defined (P) from every non-P, must be related by a relation of pervasion if M is to be used as a *hetu* for proving something in P. According to Navya-Nyāya the relation of pervasion is not a necessary relation. Hence a definition states only a material co-extensive-ness of things having M and P-ness. In many cases, therefore, there are *ad hoc* conditions on M to make it co-extensive with Ps, and the defining* marks in such cases are arbitrary and artificial. In many cases even the arbitrary *ad hoc* conditions fail to make M co-extensive with P. In such cases the Navya-Nyāya philosophers follow the procedure of defining* by paradigm cases. They pick out a clear case, i.e. a recognized instance of P which is seen to possess M which may not be further analyzable. In such cases the M is a universal and the paradigm case (a P) is recognized as a clear instance of M. The M which is evident in this paradigm case is then regarded as the defining* mark of all Ps even including boundary cases. This type of definition* is called "definition* involving universals" (*jātighatitalaksana*).

We give here two examples of this type of definition*. Viśvanātha states the final definition* of inferential awareness and perceptual awareness in the following way. (1) In determining the defining* mark of inferential awareness (*anumiti*) the limiter of being contents to be defined* is the property of being an inferential awareness or inference-ness (*anumititva*). The procedure followed by Viśvanātha in this case is to pick out a clear and unambiguous case of inferential awareness, and then to observe, by introspection, the universal inhering in this particular instance. But here there is a difficulty, because according to Navya-Nyāya in one particular instance many universals which are related among themselves as wider and narrower may be present. Thus in one instance of inferential awareness the universal property *being (an) awareness* is present and can be introspectively observed to be present there. Yet this universal *being (an) awareness* cannot, obviously, be the defining* mark of inferential awareness, which is only a certain kind of awareness. So one has to observe by introspection a universal which is, as a matter of fact, present in all and only instances of inferential awareness. Viśvanātha achieves this by stating that the universal to be observed in introspection as being present in inference has to be universal which cannot be present in perceptual awareness.

According to Navya-Nyāya, different types of awareness all have the universal awareness-ness, which has universals subsumed under it that are present only in the various different species of awareness. Thus an instance of inferential awareness has two universals–the wide universal of *being (an) awareness* and the (narrower) universal of *being an inference*. Viśvanātha, by stating that the universal present in a clear and unambiguous instance of inferential awareness must not be present in perceptual awareness, succeeds in mentioning only the narrower universal of *being an inference* as the required mark.

(2) Viśvanātha in the next sentence gives this definition* of perceptual awareness: The defining* mark of perceptual awareness is the universal present in a clear and unambiguous case of perceptual awareness but which is not present in any instance of inferential awareness. But this raises a difficulty, for now inferential awareness is defined* in terms of perceptual awareness and perceptual awareness in its turn is defined* in terms of (an) inferential awareness. Thus the two definitions* become circular. The problem is to show why the circularity in definition* of this type is not vicious. As a matter of fact even in Western philosophy circularity in definitions of this type is said to be only apparent. As Bradley and Swartz write: "We wish to avoid the circularity in which we would be involved if we try to define possible worlds in terms of the logical notion of consistency and then later defined consistency in terms of possible worlds. Fortunately, there is a way out of this predicament....consider for a moment how the charge of circularity in definitions may occur in other cases. For example, to find out what it is for something to be complex and that the concept of complexity is opposed to that of simplicity, we try to find out what it is for something to be simple and find that the concept of simplicity is opposed to that of complexity. Yet such a circle of definitions can be and standardly is broken. It is broken by citing examples sometimes by ostentation (pointing), sometimes by naming, and sometimes by description....by citing clear-cut examples (they are often called paradigm cases)."[1]

There is no real circularity in the definitions of inferential awareness and perceptual awareness as given by Viśvanātha

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[1]Raymond Bradley and Norman Swartz, *Possible Worlds* (Indianapolis: Hackett and Oxford: Blackwell, 1979), p. 4.

here, for one can, and does, recognize a clear case of inferential awareness as such without referring to perceptual awareness, and vice-versa.

(2) The Second Type of Definition*

So far the defining* mark has been considered exclusively as a *hetu* of difference from everything other than the objects to be defined. There is, however, another type of definition* which is completely different from this type. This second type of definition* is used to explain why a word applies to whatever it applies to. According to Nyāya, a word becomes applicable to its referents if and only if there is a sufficient reason for its application to those referents. This reason for application must be a property of the referents. This property is the sufficient reason for application of the word to its referents. The defining* mark is the nature of the referents of the word, and is denoted by the abstract noun formed from the word. For example, jar-ness is the nature of jars and is denoted by the abstract noun "jar-ness" formed from the word "jar" by the abstraction suffix "-ness".

There may be different properties which belong to all and only those objects which are denoted by a word and the problem is to decide which of them is to be regarded as the defining* mark of the objects considered as the referents of the word. All co-extensive properties are not necessarily identical, even though two co-extensive universals are. For example, all jars and only jars have the two properties (1) having a conch-shell-like neck, etc. and (2) jar-ness. Now these two properties, although extensionally co-extensive, are still different, for (1) is an analyzable property while (2) is not. It is to be noted that jar-ness cannot be [correctly] used as a reason to infer that jars are different from non-jars, for here the limiting property of being the object to be defined, jar-ness, becomes the same as the defining* mark. Thus jar-ness cannot be regarded as the defining* mark of jars in the first sense of the term. Jar-ness can, however, be the defining* mark of jars in the sense of being the sufficient reason for the application of the word "jar" to jars. In this case, the limiting property of being the object to be defined* does not become identical with the defining* mark jar-ness, for the limiting property is not, in this case, jar-ness, but the property of being the referent of the word "jar". In this type of definition* we are not considering the jar as an object to be defined*, we are considering jars only as referents of the word "jar" and trying to discover the sufficient reason for its application to them.

The defining* mark in this sense is a sufficient reason for the application of a word to its referent(s), but need not be a necessary condition as well. For it is possible that different words may be applied to exactly the same objects for different reasons. This difficulty is solved by specifying the word. Then, once the word is given, the necessary and sufficient condition for its application to its referents is the property denoted by the abstract term formed from the word. If a different word applies to exactly the same objects, the necessary and sufficient condition for its application to its referents will, in general, not be the same as that of the first word. It is only in the case of two synonymous words that the necessary and sufficient conditions for their application will be the same.

(3) Relation Between Two Types of Defining* Marks

A usage-explaining defining* mark is the object (i.e. the property) the cognition of which produces the correct use of the word. A distinguishing defining* mark is the object (property) of that cognition which produces the inferential cognition that objects defined* are different from everything else. These are the two ways in which a defining* mark is useful. The usefulness of a defining* mark is, thus, what one can get from its cognition. The usage-explaining defining* mark of earth is earth-ness, the distinguishing defining* mark of earth is smelliness. For in order to use the word "earth" correctly it is necessary to have the cognition of earth-ness (i.e., that the word "earth" is applied correctly to all and only those things which have earth-ness), which cognition one has to have before being able to use the word. But earth-ness cannot be a distinguishing* mark of earth, as then inference will involve *petitio principii*. Smelliness, again, can only be a distinguishing* mark of earth, for it can be used as a reason in the inference of the difference of earth from non-earth. It cannot, however, be a usage-explaining mark, for one who does not have the cognition that earth and only earth possesses smell can yet use "earth" correctly. Cognition of smelliness is not the reason for the correct use of "earth".

Paṭṭābhirāma, the author of *(Siddhantamuktāvalī)Mañjūṣā*, explains a different theory of the relation between usage-

explaining and distinguishing defining* marks.[1] On the theory generally accepted by Navya-Nyāya philosophers the two types of defining* marks are different, as explained above. Paṭṭābhirāma's theory is that the distinguishing defining* mark is the only defining* mark in the proper sense of the term. A defining* mark may or may not be usage-explaining, but to be a defining* mark it has to distinguish the defined* contents from everything different from them.

Against this theory it may be pointed out that in that case being as such cannot be defined*, for it cannot be distinguished from anything other than being, because there can be no such entity (it is nothing). The reply to this objection is that in such cases the object to be defined* should not be cognized under the mode of being-ness, which is a global property, but under the mode of being the referent of the word "being", which is not a global property, as it involves relation to a particular word.

Similarly, the objection--that earth-ness cannot be a defining* mark in the proper sense of earth since earth-ness cannot be a correct reason for inferring the difference of earth from non-earth--can be met by holding that the limiter of being the object to be defined* in this case is not earth-ness, but rather being the referent of "earth".

Now Paṭṭābhirāma gives the theory of Mahādeva. According to Mahādeva a usage-explaining defining* mark is the content of the a cognition which enables one to use the word correctly; this cognition is the reason for application of a usage-explaining mark. One infers, then, that smelliness will be a usage-explaining mark of the word "earth" as much as earth-ness. For as earth-ness is pervaded by the correct applicability of "earth" (wherever there is earth-ness "earth" is correctly applicable–this is just one side of the equivalence), and as smelliness is pervaded by earth-ness, smelliness, too, is pervaded by the correct applicability of "earth" and hence can be used as a *hetu* for inferring its correct applicability. Thus the limiter of being objects to be defined* is always a property of the objects themselves, but is never the property of being the referents of the words.

Thus we have three different theories of the relation

[1]Paṭṭābhirāma Śāstrī, *Mañjūṣā* on Viśvanāthas *Kārikāvalī*, edited by C. Sankara Rama Sastry (Mylapore, Madras: Sri Balamanorama Press, 1915-1923), pp 98-101.

between two kinds of defining* marks. (i) The commonly accepted theory is that these are of two different kinds; (ii) the second theory is that a defining* mark in the proper sense is only a distinguishing mark, the so-called usage-explaining mark too can be used as a *sādhya* for inferring difference from all others by only re-interpreting the limiter of being an object to be defined* as the property of being a referent of a word. If this property is regarded as the limiter, then all the usage-explaining marks can be used as distinguishing marks; (iii) Mahādeva's theory is that a distinguishing mark can be used as a usage-explaining mark, by conceiving a usage-explaining mark as a mark the cognition of which enables one to infer the correct applicability of the word. Thus there are only distinguishing* defining marks, and no special type of usage-explaining defining* mark.

Now Paṭṭābhirāma gives his own solution of this controversy. According to him, there are two motives for finding defining* marks:

(i) When one hears the word "earth" one may want to know the distinguishing mark of earth. Here the limiter of being a *definiendum** is a property of the objects denoted by the word.

(ii) Or, one may want to know why the word "earth" is applicable to what it is applicable to. Here the limiter of being the *definiendum**-hood is being a referent of the word "earth".

Thus Paṭṭābhirāma concludes that both types of defining* marks are prepared to correspond to the two different motives for discovering and using defining marks.

(4) Some Special Features of the Navya-Nyāya Theory

The defining property must be present in all and only objects to be defined*. We have already seen that according to Nyāya there are two different types of definition*–(i) as a reason for differentiating the objects to be defined* from other objects; (ii) as the reason for the application of a word to its referents. Navya-Nyāya has developed an elaborate technique for showing that the defining* property is present in all and only the objects to be defined*. The problem arises specially in the case of objects of very different kinds when all of them are to be defined* in one definition. The usual procedure is to find out as simple a property as possible and then to find types of relations which relate the simple property to the different cases. This shows that the Nyāya theory of definition* is very different from the Western theories of definition, according to which all

the objects become instances of the defining property which is a universal. According to Nyāya, the defining* property must be common to all and only those objects which are to be defined only in the sense that the defining* property is related to them all, usually by very different relations. For example, we may consider the defining* property of types of pervasion–positive and negative. To define* pervasion, if one fixes the property of being absent from all places where there is absence of the *sādhya*, then this property becomes the defining* mark of only one type of pervasion, but one cannot apply this definition* to only-positive pervasion, which is not absent anywhere. If, on the other hand, one defines* pervasion as being the counter-positive of an absence which pervades the absence of the *sādhya*, then one can define only negative pervasion. But we cannot in this way find a property which is common to both types of pervasion, positive and negative. The common property, therefore, has to be sought elsewhere, i.e., in what both the types of pervasion prevent. If one has a cognition of whatever type of pervasion prevents the cognition of deviation, then both types of pervasion can be defined* as the content the cognition of which prevents the cognition of deviation. In this way, two different types of pervasion, defined* in two ways, are brought under one definition* by finding a property common to both.

There are two fundamental ways in which the Navya-Nyāya theory of definition differs logically from Western theories, apart from the ontological point of view. One way in which it differs from Plato's theory is that Plato tries to find out the essence of the universal of justice, for example. In Navya-Nyāya, definitions* are properties, not necessarily "essences" (universals), and may even be individual properties belonging to single individuals.

In Plato, Aristotle, and Porphyry there is a hierarchy of genus and species, and definition is *per genus et differentium*. Thus every definition excepting that of the *summum genus* must have at least two components–the generic property and the differentia. The defining property of man, for example, is animality and rationality. The Navya-Nyāya theory of definition* is fundamentally different from this traditional Western theory because the structure of the defining* propery is not always composite, especially when it is a proper universal in the sense of Nyāya. A universal is an unanalyzable property even though it may be subsumed under a wider universal. No

universal is a composite of the generic property and the differentia. Thus the defining* property of man in the second sense–i.e., the defining* property in the sense of being the reason for the application of the word "man", for example–is just humanity, even though it is subsumed under the generic property of animality. According to Navya-Nyāya humanity as a property is a simple property as animality is and cannot be obtained by adding the differentia to the generic property. Analysis of a concept is possible only in terms of properties that are not proper universals. Universals, when not referred to by an expression, are known in and through themselves and not under the mode of some other property, and therefore do not stand in need of analysis. Indeed, they cannot be analyzed at all.

The second fundamental point of difference in theories of definitions stems from the Navya-Nyāya doctrine that a defining* property need not be a universal. A proper universal is related to all its instances by one relation, inherence, according to Navya-Nyāya. The defining* property is very often a property different from a proper universal and is often related to different types of objects by different types of relations. Navya-Nyāya has, therefore, developed a very elaborate technique of showing how the defining property can be said to be "common" to things which are very often ontologically different. This is done by determining the specific nature of the relation in which the defining* property can be said to be "common" to the different types of objects. This specific relation between the defining* property and the different types of objects is very often a sum or a product of the different relations by which the defining* property is related to the different types of objects. This sum (product) of relations is necessary, for it is by this relation that the defining* property can be said to be "common to" all the different types of objects. As an example of this technique of showing how a defining* property is "common to" all the objects to be defined, we may explain the definition of being a positive entity (*bhāvatva*). According to Navya-Nyāya, there are six ontological categories of positive reals. There is one proper universal common to the first three categories of positive reals, namely existence (*sattā*), which is the highest universal (*parājāti*). Existence, being a universal, is related to the first three categories of reals by the relation of inherence.

Existence is a property common to the first three categories in the sense of being related to them by inherence. Now, according to Navya-Nyāya, the remaining three categories of objects, although they too exist, do not have existence *inhering* in them. Thus, if existence is to be the defining* property of being a positive object it must be related to the last three categories of objects by other relations. Navya-Nyāya shows how existence can be indirectly related to the fourth and fifth categories of objects. Universals and individuators inhere in, say, substances, in which existence also inheres. So existence is related to universals (and individuators) as both inhere in the same object(s).

Still there is the problem of showing how existence can be related to inherence itself, for inherence is the sixth category of positive reals. Existence cannot inhere in inherence, for according to Navya-Nyāya existence inheres in only the first three categories of positive reals. According to Navya-Nyāya existence is related to, located in, inherence by a self-linking connector which is ontologically inherence itself. Existence is present in inherence by inherence itself. There is no need to postulate an ontologically different relation between existence and inherence. Thus, although the relation between existence and inherence is not inherence as inherence, but only as a self-linking connector, still it is inherence which is ontologically the same as this relation. Thus existence is "common to" all the six categories of positive objects.

The technique of stating a very simple property as simply qualifying an object, and then stating explicitly in what sense this relation is to be taken so that the property is shown to be common to all and only the objects to be defined*, is called *anugama* of the defining* mark, i.e., showing how the defining* mark is related to all and only the objects to be defined*. The point to be noted here is that the relation is a very complex relation, sometimes a union (*anyatarasambandha*), sometimes a product (*ubhayasambandha*), of relations which themselves may be complex, sometimes a chain relation,

(i) (Ex)(aRx . bSx), (ii) (Ex) (aRx. xSb),

where (i) is reducible to (ii) by using the converse of S. But as converses are not used in Navya-Nyāya both the forms (i) and (ii) of chain relations are used instead. In the example given above, the second term of the union is itself a relative product of the form (i).

There is, however, another important aspect of the Navya-Nyāya technique of *anugama*, which we now explain.

(5) The Technique of Expressing Universality

In Western logic universal laws are formulated by means of variables. These variables are signs bound by some operations. They also act as place-holders for names of their values. Because of the convention that the same name is to be written at all places where a variable occurs (within the scope of one quantifier, or in the same formula if it occurs freely), the variables perform the function of relative pronouns.

Although variables have been used in Indian algebra for a long time they have not been used in Nyāya. In Indian algebra before the introduction of variables the pronouns *yāvat/tāvat* were used. In Nyāya, a very popular method is similar to this practice. It uses relative pronouns *yattat* (that which), *sva* (its own), etc. Example:

> Df. P. Pervasion is the co-presence of that with that which is not limited by the limiter of the counterpositiveness to the constant absence that has a common locus with it and has no common locus with its counterpositive.

In this definition the first "that" stands for *hetu*, the second "that" for *sādhya*, the "it" stands for *hetu*, "its" for the constant absence. The "its" occurs only in the translation: in Sanskrit it is eliminated by a compound.

(i) This method has the disadvantage of not being able to show the pattern of cross-references–it is not clear which "that" has to go with which "which" if in the sentence there are two or more "that"s or "which"s.

(ii) Though the technique of using relative pronouns is widely used in formulating universally valid laws, yet Raghunātha reports that many logicians find fault with it. The controversy between the older and the later logicians centers around the interpretation of the relative pronouns. The older logicians hold that these pronouns stand for any and every object, hence sentences containing them are universal. The later logicians point out that although pronouns like "that" can stand for anything, yet they cannot stand for everything simultaneously. For example, in the clause "the book that I purchased....the pen that I purchased", etc. the "that" in the first clause stands for the book, while in the second "that" stands for the pen. These logicians argue that the meaning of relative pronouns like "that", etc. involves reference to the particular

object one has in mind when he uses these pronouns. This means that the very meaning of the "that" in the first clause involves reference to the book, whereas that of the "that" in the second clause involves reference to the pen. But if the very meaning of "that" involves reference to what one has in mind at the time he uses it, then the sentence containing the word "that" becomes particular. We can, of course, have any number of particular sentences by changing the reference of the word "that", but the sentence containing "that" cannot be true of all things simultaneously. So they developed a method, called *anugama*, of eliminating these pronouns from definitions, which we explain below.

The older logicians, however, do not accept this interpretation of the relative pronouns. They hold that these pronouns, of course, refer to particular objects which one has in mind, yet the meaning of "that" etc. does not involve reference to these objects. Hence sentences containing these pronouns express a universal trait common to all the cases under consideration.

We may compare here the Western method of expressing universality by means of variables. The law $(x)(x = x)$, for example, is logically true. The sentence means, if we eliminate the quantifiers and the variable by assuming the universal to consist of entities a, b, c...., the conjunction $a = a, b = b, c = c$...., etc. That is, the sentence expresses a truth about a, b, c., etc. simultaneously, for it is a conjunction of true statements about all entities.

The difference between the theory of the older and the later Navya-Nyāya philosophers may be explained in the language of modern Western logic thus:

(1) According to the older school, the pair of relative pronouns "that–which" stands for a universally-quantified sentence.

(2) According to the later school, this pair stands for a sentence with a free variable. Such a sentence may serve the purposes of a universal sentence only by substituting names for the free variable where it occurs. Still, each substitution will yield a singular sentence. Hence these philosophers use the technique of *anugama* to avoid using relative pronouns altogether. We may explain this point with an example of two types of definitions of false cognition.

Df F. C. A cognition is false if and only if it has a that- mode in what has an absence of that.

Thus cognizing some thing as a piece of silver is to have a cognition with silver-ness as its mode. This cognition is false if and only if the object cognized has absence of silver-ness, i.e. is not a piece of silver. In this definition the relative pronoun "that" occurs twice, indicating that they necessarily refer to the same thing. But the point of the later school is that here we have got the definition of a false cognition of silver, not of false cognition in general. We can, of course, substitute any name to get any number of definitions all of which are singular sentences.

To avoid this difficulty, the technique of *anugama* is used, by which all occurrences of relative pronouns are eliminated from the definition. So we have the following definition of false cognition:

Df. F. C. A. False-ness (is) being a cognition determining object-hood qualified by a thing, the qualification being by both the relations (i) residence in itself and (ii) being limited by a property not resident in itself.

Any cognition has an object, i.e. determines object-hood resident in the content of that judgment. But the cognition is false when the mode under which the content is cognized is not a property of the object intended, does not belong to that object. The relation of the content to the object-hood is by the product of two relations–the object-hood's relation to the thing (itself), and being limited by a property not resident in the thing (itself). Now this definition is completely general because it involves only general terms. The relative pronoun "itself" occurs only in the statement of the relation. But this is how all relations except inherence are stated in Navya-Nyāya. A relation of this type is the referent of an abstract relative term, like "object-hood", which has a free variable in the place of the successor, thus:

object-hood = ($lambda_x$) = [x is an object of (the cognition) y]

where "y" is a free variable and is expressed by "its", "itself", "one's own" (*sva*), etc. Thus the relation of a cognition to its object is by the relation *object-hood determined by (the cognition) itself,* which is a completely general relation. Particular relations are obtained by assigning different values to "itself".

K. Some Terms of the Technical Language of Navya-Nyāya

(1) Introduction

Navya-Nyāya is not just one school among other schools of Indian philosophy. It is also the provider of, as it were, a technical philosophical *lingua franca* for all the other schools. This is primarily because Navya-Nyāya philosophers developed a technical language which became the language of all serious discourse. This language, which developed within the language of realistic Vaiśeṣika ontology, was however found to be ontologically neutral, and was used not merely in different philosophical schools–for example, in Advaita Vedānta by Madhusūdana Sarasvatī in his *Advaitasiddhi*, in Pūrva-Mīmāṃsā by Khaṇḍadeva in *Bhāṭṭarahasya*, in Sāṃkhya and Śākta philosophies by Pañcānanda Tarkaratna in *Tattvakaumudī-Pūrṇimā* and *Brahmasūtra-Śaktibhāṣya*, and so forth, but also in grammar, philosophy of language, poetics, law and other branches of study. We shall have to explain how this language could be so universally used.

In contemporary Western philosophy the language of symbolic logic has been developed and is used extensively, not merely in logic and mathematics, but also in biology and other physical sciences, in grammar (especially the grammar of formal languages), in economics, and only marginally in epistemology, ethics, and law. The discovery and development of the arithmetization of syntax and recursive function theory led to the development of Turing machines and other machine languages, which have been indispensable in computer programming. Thus the thrust and tenor of technical languages developed in the West have been mainly scientific, the application of the languages to poetics or philosophy has been almost absent. This contrast between the technical language of Navya-Nyāya and symbolic logic points to an important difference between the humanities and the sciences, which we discuss below.

The technical language of Navya-Nyāya is non-symbolic but rigorous, and is a development of Sanskrit, just as Western syntax and semantics must use natural languages like English. It is debatable whether Sanskrit was ever a living language, and when Navya-Nyāya developed, it was surely a frozen language. Sanskrit as a frozen language has close affinities with artificially constructed languages as we have them in the West. We must not lose sight of the fact that Sanskrit, from ancient times, had

a very rigorous grammar, so much so that Sanskrit grammarians may be regarded as founders of the science of grammar. Sanskrit, as a frozen language, has well-defined and rigorous rules of formulation from an alphabet which is phonetically arranged, and has grammatical rules that are linearly ordered for scope in Pāṇini's *Aṣṭādhyāyī*. So Navya-Nyāya philosophers took advantage of this feature of Sanskrit in developing their technical language.

Navya-Nyāya language developed so that it could describe structures cognized on various occasions. Thus this language could be used in every sphere where cognition, belief, doubt, and other epistemic and doxastic factors play an essential role. This explains why this language could be used universally in the humanities, where the epistemic factors predominate. In the physical sciences, however, propositions are stated in total, or nearly total, independence of the knowing subject. Hence Navya-Nyāya language, which is very helpful in the humanities, does not seem to be applicable in the sciences. Although mastery of the Navya-Nyāya language is considered essential for studying medicine (*āyurveda*), still no work of medicine has used that language. Western logic, on the other hand, developed historically so that it could be applied to mathematics and is oriented basically toward science, and is thus inappropriate for use in the humanities.

Navya-Nyāya language is not a metalanguage in the sense of being a language about a language. It is a language that has been developed so that it can describe cognized structure in terms of the Navya-Nyāya theory. This is different from ordinary Sanskrit, which is used to express cognized structure. Thus the distinction between expressing a cognized structure and describing it in a theoretical language is fundamental. Lukasiewicz stated that Aristotle used two types of expressions for saying the same thing. For example, "all A is B' or "B belongs to all A", and "B is predicated of all A", are used indiscriminately.[1] Yet these two types of expressions are radically different. "All A is B" and "B belongs to all A" are expressions of cognized structure, but "B is predicated of all A" is of a different type containing "predicated of", which is a theoretical term of logic or grammar, and is not an expression

[1]Jan Lukasiewicz, *Aristotle's Syllogism from the Standpoint of Modern Logic* (Oxford: Clarendon Press, 1957). Second edition, enlarged, pp. 2-3.

of the object language of the earlier expressions. In other words, while "All A is B" expresses a factual situation, "B is predicated of all A" cannot do so, for the relation "being predicated of" is not a factual relation, but is a grammatical or epistemic one. Thus the sentence analyzes a fact as cognized or a statement made according to rules of grammar. This latter interpretation makes it easy to make this sentence a sentence of a metalanguage, of grammar. According to Navya-Nyāya philosophers, "B is predicated of all A" is a description or analysis, in terms of a theory (logic or grammar) of what "All A is B" or "B belongs to all A" expresses. Hence they all belong to the same level of expression; they are about objects. We shall now explain the Navya-Nyāya theory in terms of which all cognized structures are analyzed and rigorously described.

(2) The Navya-Nyāya Theory

Construction-filled cognitions are cognitions of relational complexes of the form aRb. We now introduce three epistemic definitions:

Definition 1, of "the qualificand of a construction-filled cognition": a in the cognized structure aRb is called "the qualificand of the cognition" as well as "the qualificand of b".

Definition 2, of "qualifier (mode) of a construction-filled cognition": b in the cognized structure aRb is called "the qualifier (mode) of the cognition" as well as "the qualifier (mode) of a".

Definition 3, of "relation in a construction-filled cognition": R in the cognized structure aRb is called "the qualification in the cognition".

This means that every sentence expressing a construction-filled cognition has to be given a *de re* interpretation of all the elements, a, R, and b. All these elements are real objects. Every construction-filled cognition of a structure of the form aRb is interpreted in Navya-Nyāya theory as the cognition of b in a by R. Thus Navya-Nyāya theory is that every construction-filled cognition has to be analyzed as a cognition of something in something, of something possessing something, something cognized under the mode of something. In the Western tradition generally, every proposition, including relational propositions of the form aRb, is interpreted as an assertion and is distinguished radically from a term. In Navya-Nyāya theory, a, as well as the structure aRb, is regarded as a complex object, and not as a proposition or fact in the sense of the *Tractatus*.

We now introduce two ontological definitions:

Definition 4, of "property" or "superstratum": b is a property (superstratum) of a in the relation R in aRb.

Definition 5, of "property-possessor" ("substratum" or "locus"): a is the property-possessor (substratum, locus) of b in the relation R in aRb.

In a cognized structure of the form aRb, one cognition is related to the three elements by three characteristic relations. The converse relations R_1, R_2, R_3, are relations of the objective factors to the cognition.

(3) The Navya-Nyāya Technique

(i) Abstraction. Usually in Sanskrit, as in English, abstract terms are formed from given concrete terms, and concrete terms from given abstract terms. Thus from the concrete terms "wise", "honest", and "man" we have the following abstract terms by adding the appropriate abstraction suffixes, making appropriate grammatical changes in the stem where necessary: "Wis-dom", "honest-y", "man-ness". So also with given abstract terms.

The abstraction suffix in Sanskrit is "*-tva*" or its grammatical variant "*-tā*", (translated as "-ness"), and the concretization suffix is "*-vat*" or "*-mat*" (translated as "-possessing"). Abstraction and concretization are inverse processes in the sense that

AC 1L *t*-ness-possessing = *t*

t-possessing-ness = *t*

where "*t*" is any term whatsoever, corresponding to the law of symbolic logic AW 2: [(*lambda*$_x$) Fx] = F.

(ii) Determiner-Determined. In aRb, a is the locus of b (definition 5), and therefore has the property of being the locus (locus-ness) resident in, that is, belonging to, a. So also b is the superstratum of a in the relation R (definition 4), and has the property being the superstratum (or superstratum-ness). Locus-ness of a is determined by the superstratum-ness resident in b, i.e. (*lambda*$_x$) (xRy determines (or is determined b) (*lambda*$_y$) Rxy.

In thus symbolizing the Navya-Nyāya concept we have to use "R" in both the abstracts. But in Navya-Nyāya technical language R goes with the successor of R, but not with the predecessor.

The structure aRb, which is interpreted as b in a by R, is described by S_1 in theoretical terms of the Navya-Nyāya system

thus:

S_1 R is the limiting relation of superstratum-ness resident in b, which superstratum-ness determines the locus-ness in a.

We now explain the concepts of limiting properties and limiting relations, that is, of limiters.

(4) The Concept of Limiter

Navya-Nyāya, in developing its theory of cognition, uses the concepts of limiting property and limiting relations at almost every step. In ontology, Navya-Nyāya accepts extensionality of classes, relations and so on. If two properties belong to, are located in, exactly the same objects, then they are ontologically identical. But this ontological identity cannot ensure the identity of cognized structures. One and the same object may be cognized differently, that is, through different modes of cognition. Now this theory that the same object can be cognized in and through different modes has been challenged by many philosophers. Findlay, for example, argues as follows:

"The same object can be referred to in many ways; we can think of the same city as the birthplace of Mozart or as the city which stands on the side of ancient Juvavum; the difference between the two ideas which we thus form of one and the same object must be in the content of those ideas. The weakness of this argument lies in the fact that it seems fairly clear that there is some difference even in the objects of the two ideas; if they concern the same city, they certainly also introduce us to other objects and relations which would suffice to distinguish them. For Mozart and ancient Juvavum are as much objects as the modern city of Salzburg."[1]

The reply to this objection of Findlay is to point out that the two ideas (cognized objects in Navya-Nyāya terminology) which refer to the same object are ontologically the same, since the identity statement "the birthplace of Mozart = the city which stands on the site of ancient Juvavum" is a true statement. The truth in Findlay's objection can be expressed in the Navya-Nyāya theory of cognition in this way: The cognition of the birthplace of Mozart has the city of Salzburg as its qualificand, and the property *being the birthplace of Mozart* as its qualifier or mode; the cognition of the city which stands on

[1]J. N. Findlay, *Meinong's Theory of Objects and Values*, (Oxford: Oxford University Press, H. Milford, 1933). Second edition, p. 12.

the site of ancient Juvavum has as its qualifier the property of being the city which stands on the site of ancient Juvavum. Both cognitions have the same qualificand, but they differ in their qualifiers or modes of cognition. Thus, according to Navya-Nyāya, the same object, that is, the same qualificand, may be cognized through different modes. These modes are properties which belong to objects and are as objective as the objects themselves.

This theory that the same qualificand may be cognized in and through different modes has a parallel in the theory of *ratio* of the fourteenth-century logician Jean Buridan:

"All the same the sense, or as Buridan calls it, *ratio*, given us by an object expression really is somehow involved when the verbal is an intentional one; Buridan says the object expression *appellat suam rationem* where we may perhaps render the term "*appellat*" (perhaps the most obscurely and multifariously employed of all medieval semantic technicalities) by saying the expression "calls up" or "evokes" its own *ratio*." Buridan's main point is in any case clear: the truth value of a sentence whose verbal is an intentional one may be changed if we change the *ratio*, the sense, given in the object expression, still relates to the same thing, the world."[1]

Buridan here talks of *ratio*, that is, of aspects of objects referred to by expressions. Although Navya-Nyāya also formulated a theory of word-meaning according to which a word refers to an object only under a specific mode or aspect, still Navya-Nyāya generalizes this distinction between an object and an aspect to all cognitions. The Navya-Nyāya philosophers hold the theory that all cognitions involving language essentially are a special kind of cognition. Neither perception nor even inference as process of knowing involves any language. When one wants to communicate to others what one has cognized in perception and in inference, one uses language. In these cases, one needs language only in order to communicate one's cognitions or to discuss their truth or falsitiy or their nature with others. With this modification and generalization, the Navya-Nyāya concept of mode is much

[1]P. Geach, "A medieval discussion of intentionality in logic", *Methodology and Philosophy of Science, Proceedings of the 1964 International Congress* (ed. Yehoshua Bar-Hillel)(Amsterdam: North-Holland Publishing Company, 1965), p. 426.

wider than Buridan's conception of *ratio*.

The word "limiter" has been used in Navya-Nyāya in various senses. We shall explain here two of the chief uses of this important concept.

In the first sense the word "limiter" is used to denote the mode of cognition of an object. Thus, when one cognizes a jar under the mode of jar-ness, jar-ness becomes the limiter of the qualificand-ness resident in the jar. This simply means that the thing jar has become the qualificand of the cognition only insofar as it possesses jar-ness, that is, insofar as it is an instance of the universal property jar-ness. As Navya-Nyāya philosophers deal with cognitions and as cognitions are transparent to introspection, there can be no doubt about which mode has been manifested in a particular cognition. Thus the limiting property of the qualificand-ness of any cognition is always infallibly known to the knower.

The difficulty arises when one has to determine the limiter from the verbal expression of the cognition. For example, when one cognizes a particular jar as an instance of the universal jar-ness, what one says is "(a) jar". Now the word "jar" refers to the thing jar under the mode of jar-ness. Thus jar-ness is the mode of presentation of the referent of "jar", namely, jars. One may cognize the same thing, namely the jar, as something containing water. If to express this cognition one uses the word "the jar", then of course the mode of cognition is not the mode of presentation of the referent of the word "the jar". For the mode of presentation of the referent of a word is conventionally fixed, while a cognition of a thing may have different qualifiers at different times. As the linguistic expression of a cognition does not always give a foolproof method of determining the mode of cognition of its object, Navya-Nyāya has devised a technical language which is adequate to express the limiting properties as well as the limiting relations of cognitions. Thus, when one cognizes a particular jar as containing water, this cognition is described as follows: The cognition which has the thing jar as its qualificand and the property of containing water as its qualifier.

When one cognizes, that is, perceives a particular brown jar and expresses this cognition by "(a) brown jar", this cognition is described in the technical language of Navya-Nyaya thus:

> First Step: The cognition the qualificand of which is the (thing) jar and the qualifier of which is brown color.

But again the (thing) jar has been cognized as a jar, that is under the mode of jar-ness, and the brown color has been cognized under the mode of brown-ness. Hence the entire cognition stated in the technical language of Navya-Nyaya becomes:

> Second Step: The cognition having its qualifier-ness which is limited by brown-ness and the relation of inherence, and which determines the qualificand-ness limited by jar-ness.

This simply means that the jar has become the qualificand of the cognition only insofar as it has jar-ness, and the brown color has become its qualifier only insofar as brown-ness inheres in the jar.

The qualificand-ness resident in the jar is determined by the qualifier-ness resident in the brown color. This is because the jar is the qualificand of the qualifier, the brown color; the qualifier-ness resident in the brown color is a qualifier-ness limited by brown-ness and inherence. The qualificand-ness resident in the jar is qualificand-ness limited by jar-ness.

An important point to be noted here is that although the mode of cognition becomes the limiter, it is a limiter only of a relational property residing or located in the object referred to by the word. Any object becomes the qualificand or the qualifier of a cognition only under some mode. This mode is the limiter of qualificand-ness or qualifier-ness, but not of the qualificand nor of the qualifier. So, also, when an object is the cause of another object the modes under which the cause and the effect are cognized become the limiters, not of the cause and the effect, but of the properties of being the cause (cause-ness) and being the effect. Thus generally, when any object, a, is related to another object, b, by a relation R, a has the property of being the first term of R and b the property of being the second term of R. The modes under which the objects a and b are cognized become the limiters of these properties. Thus we can never have a *definiendum* like "xRy" but only something like "x cognized under the mode F is related to y cognized under the mode G by the relation R". This explains the function of the limiter. In aRb, a has the property of being the predecessor (predecessor-ness) and b the successor-ness, of R.

In cRb, c has predecessor-ness, and b has successor-ness, of R. How can one distinguish the predecessor-ness resident in a from the predecessor-ness resident in c, especially when R is the same in both cases? The difference in the predecessor-nesses resident in a and c is due to the limiters of the two predecessor-nesses. In the first case, the predecessor-ness is limited by a-

ness (this-ness), and in the second case it is limited by c-ness (that-ness). Thus the limiters are differentiated between the predecessor-nesses and successor-nesses residing in different objects.

What is limited by limiters may be of two kinds. The word "*avacchinna*", ("limited", "determined") is used not only for a relational abstract which is limited by the mode of cognition of the term related, but also for a thing's nature which is determined by the mode of cognition of the thing. The nature determined by the mode of cognition is of the form of their subject represented by the concrete concept of the thing, the mode of cognition is the form without subjects represented by the abstract concept of the thing.[1] For example, water cognized as water, that is, under the mode of water-ness, is said to be limited by water-ness. In "absence of (a) jar" there is an ambiguity: the meaning may be "absence of a particular jar" or "absence of all jars". This ambiguity is resolved by the use of limiters in a different sense, which we shall explain presently. The point is that the sense of limiter as a mode of cognition does not show the quality of what is cognized.

This first sense of "limiter", as the mode under which an object is cognized so that it can be related to another object, does not give us any indication of the quantity of the cognition. Thus to say "cognized under the mode of fire-ness", that is, "limited by fire-ness" (*vahnitvāvacchinna*), does not give us any indication whether the object cognized is just one particular fire or all fires. Here an adjective of quantity like "all" has to be added.

Now there is a second sense of "limiter", in which it is used to indicate quantity of cognition. There are two types of reasons, ontological and epistemic, for admitting limiters of relational properties over and above the relational properties themselves. It is only the epistemic reason which explains how the concept of limiter is used to show qualification. In this respect, the Navya-Nyāya theory of limiters is fundamentally different from Buridan's theory of *ratio*. Now we explain the two types of reasons, ontological and epistemic, for admitting

[1] C. Goekoop, *The Logic of Invariable Concomitance in the Tattvacintāmaṇi* (Dordrecht: D. Reidel, 1967), p. 13.

limiters of counterpositive-ness.[1] These reasons may be used *mutatis mutandis* in the cases of relational properties.

(i) Ontological Reasons. The sentence or the proposition "the chair is on the floor" is contradicted by the proposition "the chair is not on the floor". This relation of contradiction between the two propositions or sentences is, according to Navya-Nyāya, grounded in a relation of incompatibility between two entities, the chair and the absence of the chair. According to Navya-Nyāya, a cognition of the form "a is not b", or "a is not in b", is a cognition of the absence of b in a. Now to say that b is absent from a requires that we specify what it is for b to be present, certainly not in a, but in some other object, say c. Unless it is specified what it is for b to be present, we can not say what it is for b to be absent. Now to be present b has to be related by some specific relation to c. This relation is the limiting relation of the counterpositive-ness resident in b and is determining the locus-ness resident in a. If we do not include this specific relation in which b is said to be present in c, there cannot be any incompatibility between presence and absence of b and no contradiction between the corresponding propositions. For example, the two propositions "the chair is on the floor" and "the chair is not on the floor" will not be contradictory to each other if "being on the floor" in the two propositions is understood differently. Even though the chair is in contact with the floor, still the chair will not be related to the floor by the relation in which the chair is related to its parts. The chair inheres in its parts but cannot inhere in the floor because the floor is not a part of the chair. So both the propositions "the chair is on the floor" (by contact) and "the chair is not on the floor" (say, by inherence) will both be true and hence not contradictory. Navya-Nyāya, therefore, postulates that whenever a cognition of an absence is considered, it is necessary to take into consideration this specific relation by which the counterpositive is to be present somewhere.

The ontological reason for admitting a limiting property of the counterpositive-ness resident in the counterpositive of an absence is this. Consider the proposition "there is a substance". If we do not specify here the mode under which a substance is to be cognized, the two propositions "there is a jar on the

[1] Mahesa Chandra Nyayaratna (ed. Kalipada Tarkacarya), *Navya-Nyāya Bhāṣāpradīpa* (Calcutta: Sanskrit College, 1973), p. 33 ff.

ground" and "there is no chair on the ground" will not be contradictory even both jars and chairs are substances. It may be suggested here that this difficulty may be avoided by stipulating that what is said to be present on the ground must be the same as that which is said to be absent there. But this answer, without bringing in the concept of the mode under which the counterpositive of a negation is cognized, is inadequate from the Nyāya point of view. This is because Navya-Nyāya accepts the principle that an entity qualified by some other entity is ontologically identical with the unqualified entity. For example, existence (*sattā*) inheres in three categories: substance, quality and motion. Now this existence qualified by exclusion from quality and motion is ontologically the same as existence pure and simple. Yet existence qualified by exclusion from quality and motion is not present in quality and motion where existence is present. Thus quality and motion are the loci of both existence and the absence of existence. This violates the rule of incompatibility between an object and its absence. The rule is that where the object is present it cannot be also absent and *vice versa*. Existence which is not present in quality and motion is existence qualified by exclusion from quality and motion. But because the qualified existence is ontologically the same as unqualified existence, that is, existence pure and simple, existence and non-existence cease to be incompatible. It is, therefore, necessary to introduce the concept of the limiter of the counterpositive-ness, which is the mode under which the counterpositive of an absence is cognized[1] and which is, therefore, an epistemic concept. Thus even though qualified and unqualified existence be ontologically identical, still, in cognition, they are cognized differently through different modes of cognition. Thus, in order to ensure the relation of incompatibility between an object and its absence, the notion of a limiting property of counterpositive-ness is necessary.

(ii) Epistemological Reasons. According to Navya-Nyāya a cognition of an object blocks or prevents the cognition of its absence under certain conditions. Now this blocking of one cognition by another is possible only when the limiting relation

[1]"*Yaś ca pratiyogi bhavati, tatra viśeṣaṇatayā pratiyamāṇo sādhāraṇo dharma tadgata pratiyogitayāvacchedako bhavatīti phalitārthāḥ*" (*Navya-Nyāya Bhāṣāpradīpaḥ*, op. cit., p. 34).

of counterpositive-ness resident in the counterpositive and the limiting property are essentially involved in the cognitions. Just as without these limiters there is no incompatibility between an object and its absence, so also without these limiters there will be no blocking of one cognition by another.

Now we explain how the concept of limiter is used in Navya-Nyāya to specify the quality—universality or particularity—of cognitions. For this purpose the word "limiter" is used in an altogether new sense. This sense is that the limiting property is co-extensive with the relational property that is limited by it.[1] For example, in "absence of (a) jar", if the counterpositive-ness resident in jar is limited by jar-ness then it will be the absence of jar-in-general, the absence of any jar. But if the counterpositive-ness is limited by this-jar-ness, then the absence will be of this jar, the absence of a particular jar. As the limiting property and the relation property that is limited by it are co-extensive, wherever the limiting property is present the limited property also is present, and vice versa. So also in other cases of limiter–the limiters of *hetu*-ness and of *sādhya*-ness, or qualificand-ness, qualifier-ness and so on.

Using limiters to indicate the quantity of a cognized structure (according to Western logic, the proposition) differentiates the Indian logic of qualification from Western logic in a fundamental way. In Aristotelian logic, as also in modern symbolic logic, propositions or sentences are classified into four different; forms–A, E, I, O–by quantity and quality. Universal (A and E) propositions in Western logic are those wich are quantified by the use of words like "all", "every", "any", "no" and so on. Quality, especially negative quality, is indicated by using word like "no", "not", or "never" and so on. Now according to Navya-Nyāya, any thing indicated by words occurring in a sentence will enter into its content and cannot belong to its form. That is why, according to Navya-Nyāya, the so-called quality of a proposition or sentence, which has to be indicated by the presence or absence of a negative particle, cannot be a matter of form. So also if quantity in sentences is indicated by using words like "all", "some" and so on, then quality will also be included in the content of the meaning of the sentences but cannot belong to their form. Accordingly,

[1]"*Anyunā nātiriktavṛttidharmaṣyaivāvacchedakatam.*" (*Nyāyakusumāñjali*, p. 84.

Navya-Nyāya, which deals with cognitions rather than with propositions or sentences, sees a fundamental difference between the quantity and the quality of the content cognized. Quantity, like universality and particularity, cannot be expressed by any words occurring in a sentence which expresses the cognition, or rather the content of the cognition. Words occurring in such sentences refer to objects and are cognized as referents. But according to Navya-Nyāya, a word can refer to an object only if the object is presented under a specific mode, which must be a property belonging to the object and is the cause for the application of the word to the object. This mode of presentation, although meant by the word, is never its referent; it is the qualifier of the construction-filled cognition resulting from hearing the word, and the mode of presentation of the referent of the word is the qualifier. This mode under which falls the referent of a word is called the limiter of being a referent of the word. Now this limiter is co-extensive with the property of being referred to by the word. Whatever is referred to by the word has this property, and whatever has this property is a referent of the word. Thus, the concept of limiting property in the sense of a co-extensive property of what is limited reveals or manifests the quantity of the structure cognized.

It is to be noted here that a limiting property or relation in this sense is not to be identified with what gets manifested in cognition. This is because even a property which is not a mode of cognition can become a limiter in that cognition. A heavier property, even though it is manifested as a mode, cannot be a limiter if there is a lighter property co-extensive with it. When a person hears a sentence uttered by a speaker he, unlike the speaker himself, is not certain about the limiter. It is for this reason, that is, to avoid the uncertainty and vagueness in ordinary Sanskrit, where adjectives of quantity are not used, that Navya-Nyāya has developed a technical language using "limiting property", "limiting relation", "determiner", "determined" and so on to make explicit that which is not explicit in the sentence. Thus Navya-Nyāya language is not a metalanguage in the sense of being a language about another language. Its technical language is a device to state explicitly what been left unsaid in the ordinary language.

In Western logic, a universal sentence is analyzed into a propositional function containing at least one free variable, which becomes bound by the quantifier. The quantifier in such

logic performs three different functions: binding, abstracting, and quantifying. The operation of binding a variable is merely to delete or cancel it from the expression. Thus we have the equivalence: (*lambda*$_x$) $F_x = F$.

The binding of a variable thus results in abstraction in the sense that the propositional function yields a property. The third function, namely that of quantifying a propositional function, is really to say something about the property. A universal quantifier says that the property is universal; an existential quantifier say that the property is particular. Thus combinatory logic, which uses functions as arguments of functions, dispenses with the use of variables. Quantification, therefore, involves a higher level of thought.

In Navya-Nyāya, quantification is a matter of a way of cognizing objects. To cognize an object in one way, that is, where the limiting property is general, is to cognize the object universally. When the limiting property is a special property, the cognized structure is particular. We shall first explain here the meaning of "all" and "a" in Navya-Nyāya, and then show why universality and particularity cannot be indicated by these words.

(iii) Meaning of "All". "All" may be used as an adjective of the subject expression or of the predicate expression, which must be a count noun. "All objects are knowable" and "time has all properties" are examples of two such uses.

The first case. the referent of "all" is that which is without remainder. But this requires explanation of "being without remainder". The subject is cognized as having the predicate totally in such a case. This simply means that everything which is cognized under the mode of the subject-term possesses the property referred to by the predicate-term. (The predicate-term has to be distinguished from the predicate expression. The normal form of an expression of a cognition in Navya-Nyāya is "a as b-possessing". The predicate expression is "b-possessing", but the predicate-term is b, not "b". Thus the sentence "Socrates is wise" has to be transformed into "Socrates is wisdom-possessing", where the predicate-expression is "wisdom-possessing" but the predicate-term is wisdom.)

Gadādhara explains the meaning of "all" as an adjective of the subject (the referent of a count noun) in the following way. According to him the referent of "all" as an adjective of the subject is whatever is cognized under the mode of many-ness (a number) which pervades the mode of presentation of the

referents of the subject-term and is pervaded by the predicate. In the sentence "all substances are knowable" the subject is substances and the mode of their presentation by the word "substance" is substance-hood. The word "all" here means whatever possesses such a number that pervades substance-hood. This means that all substances are referents of the term "substance" merely as substances. Substance-hood is present in all individual substances; therefore, the number of plurality may be present at least in all substances in order that the plurality be the pervaded of substance-hood. Now this plurality, which is a number, has to be pervaded by knowability, which is the predicate in the sentence. This means that every locus of this plurality must also be a locus of knowability. Thus, the sentence "all substances are knowable" means that wherever there is substance-hood there is knowability. (Gadādhara's interpretation of "all" as an adjective of the subject-term of the relation of pervasion between three properties amounts really to transforming a universal sentence into a conditional one. This is because of the Navya-Nyāya interpretation of pervasion as a relation which is not a necessary relation. To say that a pervades b is to say that whatever possesses b-ness possesses a-ness, not that whatever possesses b-ness must possess a-ness.)

To say that all substances are knowable is not to say that there are no objects other than substances which have knowability. The use of "all" does not preclude the possibility of the predicate belonging to objects other than the referents of the subject-term. What is precluded is that the predicate may not belong to all the referents of the subject-term. This possibility is precluded by the stipulation that the plurality which is the mode of presentation of the referents of "all" must be pervaded by the predicate.

If the condition that the plurality or many-ness which is the mode of presentation of the referent of "all" is not pervaded by the predicate, then the predicate will not be present in all objects which are referents of the subject-term. For example, we cannot say correctly that all jars are blue, for the plurality which qualifies the jar is not pervaded by the color blue; whenever jar-ness is present that plurality is present, but when this plurality is present blue-color may not be present. So we can only say that some jars are blue.

If the condition, that the many-ness which is the mode of presentation of the referents of "all" be the pervader of the mode of presentation, is not given, then, too, the use of "all" will be unjustified. In the sentence "all jars possess blue color", the blue color is the predicate-term. If the many-ness is pervaded by this predicate-term, then wherever this many-ness is present blue-color will be present, and all and only blue jars will be the loci of this many-ness. But this cannot be the meaning of "all jars are blue". Hence, the further condition--that the many-ness which is the mode of presentation of the referents of "all" has to pervade the mode of presentation of the subject--is necessary. This means that wherever jar-ness is located the number is located, and wherever the number is located knowability is located.

It should be noted here that the referent of "all" being defined in terms of pervasion, pervasion itself cannot be explained in term of "all". In Western logic, where the universal or existential quantifier is regarded as basic, pervasion can be defined in terms of the universal quantifier thus:

Definition of Pervasion: s pervades h = (x) (xR_1h implies xR_2s).

But according to Navya-Nyāya philosophers, it is in terms of the relation of pervasion that the meaning of "all" is to be defined.

The second case. In the case of "all" being an adjective of the predicate-expression, its referents will be whatever has this plurality (many-ness) pervading the mode of the predicate and being pervaded by the relevant relation to the subject. In the sentence "time possesses all properties" the predicate is property and its mode is being a property. A property is something that is in another object. Being a property is pervaded by the plurality belonging to all properties. This plurality is also present in all properties in which the mode of the predicate (being a property) is present; so the plurality pervades the mode of the predicate. Again all properties are in time and hence are related to time. So all individual properties are such that the plurality (of all properties) is present in them, and being related to time is also present in them. So all the conditions of determining the referent of "all" are satisfied in this case. Wherever property-ness is located (that is, whatever is a property) the number is located. Whatever the number is located in is in time (that is, is related to the substance which is time by the temporal relation). From this it follows that whatever is a property is in time. According to Gadādhara, this is the meaning of "time has all properties".

(iv) Meaning of "One". If it is said that the meaning of "one" is whatever possesses one-ness, then it would be quite proper

to say that one man is present in the room when there are many others in the room. For each individual person will be one person. But according to Navya-Nyāya philosophers this will be a false sentence in this circumstance. In Sanskrit idiom, "one" means "one and only one". The meaning of "one" in this sense is explained by Gadādhara in the following way: If "one" is an adjective of the subject expression, then it refers to whatever possesses one-ness, which is not the counterpositive of difference present in the referent of the subject expression which is qualified by the predicate. If there are two persons A and B in the room, then A has one-ness, but A as well as B is qualified by the predicate *being in the room*, and A is different from B; A is the counterpositive of difference from B, who is also a referent of the subject expression "B" and is in the room. So we cannot say about A that one man is in the room.

So also in the case of "one" as adjective of the predicate-expression. "One" in such a sentence will refer to whatever has one-ness, which is not a counterpositive of difference present in the predicate, which is related to whatever has the predicate as its property. In the case of normal persons, we cannot say that they have one eye, for the one-ness as qualifying the predicate *eyes*, say A and B, cannot be said to belong to A or B alone. For A is the counterpositive of difference from B, which is the other eye, belonging to such persons.

It becomes clear now why Navya-Nyāya cannot use "all" to indicate the quantity of a cognition. For, in order to understand the meaning of "all" it is necessary to use the cognition of pervasion, which therefore cannot be indicated by "all". But the concept of pervasion itself involves universality, so universality has to be understood independently of the use of "all" This, as has been explained above, is done by using the concept of limiter in the second sense.

II Epistemology

(A) Cognition

The Sanskrit word "*jñāna*" is philologically cognate with the English "knowledge" through the Greek "gnosis". Yet semantically "*jñāna*" and "knowledge" as it is used in contemporary Western philosophy are very different. "*Jñāna*" is usually translated into English as "cognition", which we shall use here. We shall note some differences in meaning between "*jñāna*" and "knowledge".

The term "*jñāna* as used in Navya-Nyāya is at once narrower and wider in sense than "knowledge". It is narrower because "*jñāna*" is used only in the epistemic sense, never in the dispositional sense. It is wider because "*jñāna*" includes not only the usual perception, inference, and testimony, but also supposition, belief, doubt, illusion, etc.

Cognition (*jñāna*) is awareness of objects, mental states, etc.

Cognition which can be expressed in words is construction-filled cognition. It is directed to a complex object, aRb, of three factors, a, R, and b. In the cognized structure aRb a is the qualificand of the cognition, b is the qualifier, and R is the assigned relation. It should be noted that the first term of the cognized that the qualificand and the qualifier of a cognition are dependent on is the relation cognized, i.e. R. For example, when a cognition is expressed in the sentence "this is a cow", the qualificand is, of course, the object present here and now, denoted by "this". But the qualifier is not unambiguously determined. If the cognized relation is inherence, i.e. if the sentence expresses the cognition "this is cow-ness-possessing", then cow-ness becomes the qualifier. But if the cognition expressed in the sentence is of a relation of identity between this object and a particular cow now perceived, then it is the cow which becomes the qualifier because the relation of identity holds between this object and the cow.

The cognized relation, the qualificand, and the qualifier of a cognition are all objects. In Navya-Nyāya sentences expressing cognition are always given *de re* interpretations. To cognize "this is a cow" is to cognize this as a cow–often, this as cow-ness-possessing. There is no proposition admitted in Navya-Nyāya: a sentence does not state a fact, but describes only a complex object. When I perceive that this is red, I perceive a red object, an object as red-color-possessing. In the ontology, however, there are no complex objects. The reals are all simple. A red jar is not a separate real in the ontology, although the cognized object, the red jar, is one object relative to the cognition; outside the context of this cognition, in the ontology, there is no red jar as a complex reality. The unity of the cognized object is explained by relating one cognition to the three ontological reals by three different relations. The one cognition, the cognition of a red jar, is related to three ontological reals by three different relations. These relations which the cognition has to the three reals become known only in a secondary introspective awareness of the cognition.

Although the primary cognition is, as a matter of fact, related by these three relations to the three different reals, these relations to the three objective elements are not known in the primary consciousness. The unity of the cognized structure consisting of three elements is due to their relations to one and the same cognition. The cognition of a red jar may be described as the cognition which has red color as its qualifier, the jar as the qualificand, and inherence as the relation.

When two objects are related by a relation they become correlatives by that relation. Thus in the object complex aRb, a and b are correlatives by R. In the Navya-Nyāya terminology the property of being the first term of the relation R located in a (*anuyogitva*) is determined by the property of being the second term of the relation located in b (*pratiyogitva*), and vice-versa. In the cognized object aRb, a has the property of being the qualificand determined by the property of being the qualifier resident in b. Thus the cognition of a red jar may be described as the cognition which has the property of being the qualificand resident in the jar, determined by the property of being the qualifier resident in the red color.

It is necessary to understand the function of the relation in a cognition. Although a relation, R, is said to be between its terms, a and b, still the relation is not related to its two terms in the same way. Jayadeva Miśra says that it might be argued that as a relation is determined by both its terms, a cognition of a relation in a construction-filled cognition must require the cognition of the qualificand just as much as of the qualifier. The answer is that although a relation is between two terms, still it is the second term (*pratiyogin*) which determines the relation and not the first term (*anuyogin*). This is enough to explain the meaning of relation words. This becomes clear when we consider such a term as "color-possessing ("colored"), which produces the cognition of inherence of color, which is the second term, the things which are colored being the first term of the inherence. If things are the second terms (*pratiyogins*) of inherence which get known when a relation is known, then there would be at times a cognition of a color possessing a thing. This, however, never happens: we always cognize the inherence of color in a substance.

But then a question arises about contact as a relation. A cognition of contact requires a cognition of both of its terms. The solution is that in perceiving two things related by contact it is the cognition of the second term of the relation which must

occur prior to the cognition of the relation. The first term of the relation is cognized at the time of perception when it is epistemically related to the sense-organ. This is because contact, like two-ness, is *vyāsajyavṛtti*; it belongs to both, but not to each. So in the cognition of such qualities it is necessary to cognize both the terms. However, two-ness is not a relation.

Because of the *de re* interpretation of sentences expressing cognition it is necessary to introduce the concept of a mode of cognition of an object. For example, if I cognize a cat on the mat, i.e. a cat as being on the mat, the cat is the qualificand, the mat is the qualifier, and being on (contact) is the relation. What is objectively a cat may be cognized as a white furry thing: instead of cognizing the cat on the mat I may cognize the white furry thing on the mat. Still, it is the cat which is the qualificand of the cognition in both the cases. The difference between the two cognitions is due to the different modes under which the thing, that cat, has been cognized. In the first cognition the cat has been cognized as a cat, i.e. under the mode of cat-ness, which is the property of being a cat. In the second cognition the cat is cognized under the mode of being a white furry thing. Thus the two cognitions are different because the modes under which the same qualificand, the cat, has been cognized are different. These modes under which a qualificand is cognized are objective properties belonging to the qualificand. The modes under which a qualificand is cognized in different cognitions are technically called "limiters of being the qualificand of the cognition" or "limiters of the qualificand-ness of the cognition". So also with the qualifier. A qualifier is an object which may be cognized under different modes in different cognitions. These modes under which a qualifier is cognized in different cognitions are called "limiters of the qualifier-ness".

We have already stated that the property of being a first term of a relation determines or is determined by the property of being the second term of the relation. Now in the expression "cognition of a content" the word "of" stands for a relation. Content-ness is therefore determined by the cognition of cognition-ness.

According to Navya-Nyayā the correlative of the content is not the subject which knows it but the cognition. It is the cognition which has the content, *viṣaya*, which is the Sanskrit term meaning the content: the term *viṣayin* (literally, that which has the content) means the cognition. The usage of

viṣayin in Navya-Nyāya is radically different from that in Advaita Vedānta. In Advaita Vedānta the self which is the knower is identical with knowledge; hence in Advaita Vedānta the term *viṣayin* means the knower. But in Navya-Nyāya, as also in Nyāya in general, the self which is the knower is ontologically different from the cognition which is a quality of the self that has it. Hence the cognized is not correlated to the cognizer but to the cognition. Two cognitions belonging to the same self may differ as existents, i.e., as temporal attributes of the self; but more importantly, two cognitions differ when their contents differ. More specifically, the qualificand, the qualifier, and the relation are regarded as contents of the cognition.

(B) Nature of Cognition

Cognition is a state of the self which refers to an object which is either simple or complex. In the case of construction-filled cognition, as we have already explained, the content consists of three elements: a qualificand, a qualifier, and the relation between them. It is to be noted here that, according to Nyāya, the cognition does not contribute anything to the content. The qualificand, the qualifier and the relation are all objectively real. This means that cognitive statements have to be given a *de re* interpretation. Thus the cognition will not have the form of "the table as brown", where the table, the brown color, and the relation of inherence between the brown color and the table, are objectively real in the same sense. As is well known, Navya-Nyāya admits seven categories of reals which have the common characteristics of existence, nameability and knowability. Cognition is of an object which exists independently of the cognition. This is true even in the case of illusory perception, which we shall explain in detail later on.

There is a further difference of Indian logic in general, and Navya-Nyāya in particular, from Western logic and philosophy. In dealing with cognition Western philosophers use as a rule indirect narration; "knowing that" is the *definiendum* of definitions of cognition. But in Sanskrit the "that" cannot be translated. As cognitions have to be expressed in words for philosophical discussion, they are expressed in direct narration such as cognition of the form "fire". The phrase "cognition of the form" means of the form of the sentence in which the cognition is expressed. Cognition as an attribute of the self cannot have any form which is a physical shape. So the usual Sanskrit terminology is "*ity ākāraka jñānam*", meaning having the form

(*ākāra*) of the *abhilāpavākya* of the cognition. According to Navya-Nyāya a single inflected word (the stem or the root plus the appropriate suffix) is a sentence. In dealing with inference, which is a kind of mediate cognition, it is usual to say that the inference is of the form "(the) hill (is) fire-possessing, the reason being smoke". This means that all cognitions are expressed in language by the subject who has the cognition and is aware of it infallibly in introspection.

(C) Duration of Cognitive Mental States

(1) Three Moments of a Cognitive Act

Cognitions, i.e. actual conscious states of believing, doubting, supposing, judging, knowing, sensing, etc. have generally three moments or phases:[1] (a) a moment of origination, (b) a moment of duration in which an act produces its own trace, and (c) a moment of cessation as a conscious state.

The first point is that two acts cannot originate at the same moment. An act originating at t will prevent every other act from originating at t. The Navya-Nyāya argument is based on the theory of voluntary action. Every voluntary action is caused by a certain cognition of an object that it is either desirable or undesirable. If more than one cognitive act could originate at the same moment, then they could all continue to exist together. In introspection, one would cognize all these cognitions of different object some of which may be desirable. So one would not know how to act, whether to go for one desirable object or for another or a third one. So there will be total arrest of voluntary action if more than one cognition is admitted to originate, and hence to endure, at the same moment. The conceptual distinction between many acts is made in Navya-Nyāya in terms of the concept of moment. One of the main differences between actual internal states, cognitive or non-cognitive, and dispositions is that innumerable dispositions can exist and endure simultaneously, while only one actual state can originate or endure at one moment.

[1]Exceptions to this rule are instances of *āpekṣābuddhi* which have two moments of duration.

(2) Relation between an Act and a Disposition

This relation is conceived as a causal one, i.e., an act produces a disposition as a cause produces its effect. There can be no disposition which is not caused by a previous act. The disposition which is thus caused by an act is a memory-trace which will again produce only a disposition, but will not be the direct cause of any type of cognition except memory-cognition and will not, for example, be the direct cause of any behavior, even of speech. Now although the relation between an act and a disposition is direct and straightforward, there is a controversy among philosophers of the Navya-Nyāya school on the nature of the relation between a disposition and an act. We have already stated that a disposition produces a memory-cognition when it is activated. This is again a causal relation, i.e., the disposition is the cause of the memory cognition, but the difficulty here is whether the disposition should continue to exist as a disposition even after it has produced the act of memory. According to one section of Navya-Nyāya philosophers a disposition after producing the memory will itself be destroyed. It will no longer remain that disposition, although the memory act again will leave behind it a new disposition which will be stronger than the old disposition in the sense that it will not require much excitation to bring about another memory act. The difficulty of this theory seems to be that it has to postulate innumerable dispositions of almost the same cognitive form. This is what has led other philosophers of the same school to hold that a disposition is not destroyed even after the production of a memory act but is rather strengthened by this production. This is the *law of practice* which can be stated as follows: A disposition gets strengthened by being activated frequently. This seems to agree with the common-sense view that in order to strengthen a memory trace we have to activate it a number of times.

It is to be noted that perceptions are of three kinds of contents–some contents of perception are desirable and hence to be attained, some are undesirable and hence to be avoided, and again there are contents of perception to which the perceiver is indifferent. For example, when walking on the road, one may perceive grass, etc. on the road. But one wants neither to have it nor avoid it, one is indifferent to objects which do not interest one. Now the perceptions of contents to which one is indifferent do not produce any traces and therefore cannot be remembered. For memory is caused by traces left by informative cognitions, and as there are no traces of perceptions of indifferent contents there cannot be any memory of such contents.

Then there is another point. Traces left in the self by informative cognitive episodes are causes of memory. But this does not mean that all details of the original cognition have to be or even can be recalled in memory. It may be that only some details of the things cognized are recalled. This kind of memory is called memory with other details not recalled (*paramuṣṭa*). One may also have memory of full details of contents as originally cognized. But this is not true in all cases.

Now we pass on to a discussion of relations between two acts.

(3) Relation between Acts

These relations have been conceived in different ways which can be classified broadly into two types: (A) psychological relations and (B) epistemic relations. Both these types of relations are causal relations. We shall call all those relations "psychological" which obtain between two acts of cognition simply as occurrences or as episodes but not as contents; whichever contents be cognized in the acts will be immaterial so far as this type of relation is concerned.

(a) Psychological Relations

There are two types of psychological relations between two acts. The first is the relation between two acts so far as their moment of origination is concerned. We have already stated that according to Navya-Nyāya two acts of cognition cannot originate at the same time, and we have explained the reason for this theory.

The second relation is the relation of the killer and the killed between two successive acts. This is also a psychological relation in the sense that this relation is not dependent upon the contents of these acts. It is a relation between two successive acts as occurrences or episodes, i.e., merely as acts of consciousness. A disposition, according to the theory that we have accepted, is a more permanent feature of the self, where an act is momentary so far as its duration is concerned. Now the problem is: why should an act not endure for more than one moment, or why should an act cease to be an act? The Navya-Nyāya answer is that an act continues to be an act so long as it is not destroyed as an act by its successor. It does not matter

whether the successor act has the same content as the preceding act or not. That is, reference to the contents of the cognitions is immaterial here. We shall note here, however, that it is necessary to conceive the preceding act (which gets killed) to meet its killer. The succeeding act must meet the preceding act if only for a moment; that is why it is necessary to assume that the succeeding act must originate while the preceding act endures. If the preceding act is already over, then it would have been over for no reason at all. It must be pushed out of consciousness, must be killed as an act by its successor. So this is also a psychological law.

(b) Epistemic Relations

Epistemological laws have been conceived in different ways to describe different types of relations between two acts of cognition. These laws are non-psychological in the sense that they hold for acts of consciousness only as referring to their contents--i.e., reference to the contents of these acts is essential for this type of relation to obtain between them. We shall give here examples of three different types of such relations.

(a) The first example is of a very general nature. Navya-Nyāya determines the strength of the conditions of different forms of cognition. In every moment of the waking state conditions for the perception of something or the other are present. The problem here is, then: How is it ever possible for us to be not constantly perceiving contents, but to make inferences or to understand what others say to us? Suppose I am now sitting on a chair, and conditions for perceiving all the objects in front of me are present. How than can I infer, as I do now, that it is going to rain very soon?

Navya-Nyāya distinguishes here between two types of cases: (i) When there is no special desire for having a special type of cognition, and (ii) when such a desire is present.

Case (i): According to Navya-Nyāya this is possible only if the conditions of making this inference (that it is going to rain) predominate over the conditions of perception. Now, in determining the relative strength of the conditions of perception, inference, understanding the meaning of a sentence heard, etc., Navya-Nyāya refers to contents of cognitions. If the contents of cognitions be the same, then the conditions of perception prevail over conditions of inference, verbal knowledge, etc. This presupposes that what we perceive may be the same as what is inferred or known from others. If, however, the contents are not the same, then the conditions of inference prevail over the conditions of perception. Thus if conditions for perceiving that it is raining are present, then even if conditions for inferring the same are present, we shall have perceptual awareness and not infer it. But if conditions for perceiving a table (viz., that the table is brown) are present and also the conditions for inferring that it is raining are present, then because the contents of the perception and the inference are different we may have the inference.

Case (ii): However, in every case of cognition the desire to cognize in a certain way rather than in any other way will produce the desired type of cognition, i.e., a desire to cognize in a certain way has overriding influence on the mode of cognition.

(b) A second example of a non-psychological relation can be explained thus. There are certain propositions such that the conditions which produce the cognition of the one produce the cognition of the other. The *Nyāyakośa* states that in such a case the two propositions are the objects of one and the same cognition. All examples given to illustrate that type of relation are logically equivalent converses of relational propositions.

(c) A third example which we now give of a non-psychological relation obtaining between two acts of cognition is very important. It is the relation of one act preventing the occurrence of another act. Navya-Nyāya, of course, distinguishes here between the psychological relation between two acts which also prevents the occurrence of one act when the other is present. So we shall have to distinguish here between two altogether different types of preventer-prevented relations between two acts of cognition. One, a psychological, not an epistemic, relation, does not depend on the contents of cognition but holds between two cognitions as occurrences. As an example of such a relation given in Navya-Nyāya we may cite the case of a man who is very much interested in or inquisitive about women. This inquisitiveness about women may prevent him from having a cognition. But the presence of this inquisitiveness prevents the occurrence of all cognitive acts by a psychological law. It has nothing to do with the contents of such acts.

But the most important type of preventer-prevented relation which obtains between two cognitive acts is in virtue of their contents and, therefore, this relation is not psychological but epistemic.

Next we shall explain the concept of a preventer in general. It is a causal concept. A preventer is really something very similar to what Mill calls a negative condition, the presence of which will prevent the occurrence of an effect. Thus if the fuel is very wet, then the presence of this wetness prevents the emergence of fire and therefore the wetness of the fuel is a negative condition, i.e., a preventer, of fire. So also in the case of cognitive acts. Every cognitive act is an effect of certain factors. It is produced by a number of causal factors some of which are positive and some negative. Any factor the absence of which is necessary for the production of an effect is a preventer of that effect. Navya-Nyāya discusses this type of relation between cognitions only in the case of contradictory or contrary propositions. In explaining the Navya-Nyāya theory we begin by referring to a difference of views among contemporary Western logicians. Arthur Pap, for example, says: "Thus explicitly self-contradictory sentences do not express anything that could possibly be believed, and the impossibility in question is not just psychological. That somebody should believe both (and at the same time) p and not-p is itself a contradictory supposition. The frequent claim that people, alas, are capable of holding self-contradictory beliefs notwithstanding, the statement 'x believes at t that p and x believes at t that not-p', implying the conjunction 'x believe at t that p' and 'x believes at t that not-p', is self-contradictory, though not formally so."[1] Eric Toms, on the other hand, asserts "That an object may be said or even believed both to have and not to have a certain property, everyone knows to be possible, alas."[2]

The problem here seems to be whether it is logically possible for one and the same person to believe that p and believe that not-p. According to Navya-Nyāya this controversy can be solved easily by a distinction between an actual state of belief and a disposition to believe. We have already seen that a second act can originate when a prior act endures, so that if we symbolize by "t" the time when the first act originated and by "t+1" the time when it endures, then we can say that it is logically possible that x believes at t that p and x believes at t+1 that q.

[1]Arthur Pap, *Semantics and Necessary Truth* (New Haven: Yale University Press, 1958), p. 163

[2]Eric Toms, *Being, Negation and Logic* (Oxford: Blackwell, 1962), p. 166.

The point which Pap is trying to make here can be explained on the Navya-Nyāya theory in the following way: We can never say truly "x believes at t that p and x believes at t that not-p", i.e., so long as x continues to consciously believe that p he cannot even start believing that not-p; so long as the belief that p endures as a conscious state the other act of believing that not-p cannot even originate. This impossibility has got nothing to do with the psychological mechanism of the origination of acts, but is completely determined by the logical relation between p and not-p. According to Navya-Nyāya the relation between a preceding and a succeeding act is that of the killed and the killer; the two acts have to meet, if only for one moment, so that the succeeding act can kill the preceding act. But in the case of cognition of two contradictory propositions, the presence of one act prevents the origination of the other act, so that they can never be co-present, not even for one moment. This is because, under conditions specified below, the cognition of a proposition is a negative condition of the cognition of its contradictory, i.e., the absence of one act is necessary for the occurrence of the other act, so the preventer act and the prevented act can never meet. If, however, the belief that p has lapsed into a mere disposition and is no longer a conscious state, or if it is forgotten and not remembered at the moment, then the mere disposition will not prevent the same person from believing actively that not-p. This explains the sense in which Toms' statement is correct.

Thus we have come to a fundamental difference between a disposition and an act. So long as a conscious act of believing that p remains a conscious act, it will prevent a person from consciously believing that not-p, but if the belief is a mere disposition and is not recalled, then the same person can believe that p and also that not-p, and one of the two beliefs can become also actualized at one time. A person can believe that not-p consciously only so long as he does not realize that he also believes that p. I.e., a person cannot consciously, knowingly, hold self-contradictory beliefs, but unknowingly , without realizing that he does to, a person can hold beliefs (as unconscious dispositions) which may not be consistent.

So far, in discussing this point, we have been using "believe" instead of "cognize". The Navya-Nyāya philosophers express their theory in terms of "cognize" which is much wider than "believe" and includes doubting, assuming, disbelieving, etc. So it is necessary to impose conditions on both the preventer act

and the prevented act of cognizing contradictory propositions.

Conditions of the preventer cognition (*pratibandhaka jñāna*):

(i) The cognition must be attended with belief: for example, it must not be a supposition or a doubt.
(ii) It may be either true or false. In either case, it must not be cognized, truly or falsely, to be false, nor can its truth even be doubted.
(iii) It must be about the proposition which is contradictory or contrary to the proposition cognized by the prevented cognition.
(iv) The cognition can be either true or false.
(v) It may or may not be attended with belief.
(vi) It must not be a supposition.
(vii) It must not be an ordinary perception, or an illusory perception due to any psychophysical defect.
(viii) The cognition must be construction-filled.

Let us explain these conditions. We first note that we are dealing with cognitions of contradictory or contrary propositions only. A mere supposition of a proposition can neither prevent nor be prevented by a cognition of the contradictory proposition. If we suppose that S is P, then this supposition, when it endures as an actual conscious state, cannot prevent us from cognizing or even knowing that S is not P. So also even if we know that S is P, this knowledge will not be able to prevent us from supposing that S is not P, only in this case the supposition will be cognized as contrary to fact. Then an illusory perception cannot be prevented from occurring by any cognition of the contradictory proposition. Thus if we are suffering from jaundice, then even though we know actively that the wall is not yellow, yet we shall see that the wall is yellow; only in this case the illusory perception will not be attended with belief. Thirdly, the preventer cognition can be either true or false; it is not always the case that only a true cognition can prevent the occurrence of a false cognition, for even a false cognition held with firm conviction can prevent one from cognizing the truth. But whether our cognition is true or false, we must not cognize it in a higher-order act to be false if it is to prevent the cognition of the truth. For if we know that our cognition is false, then we shall withhold our belief from it, and this cognition without belief will not be able to act as the preventer cognition. The cognition which is prevented may, however, be a doubt, i.e., a cognition not attended with belief; if we cognize with belief that S is P then we cannot even doubt that S is not-P.

Now we summarize. In order to be able to talk about different acts of cognition we shall use numerical subscripts thus: cognition (abbreviated as cog) $cog_2 cog_3 \ldots$, $cog_4 \ldots$. The three moments of an act of cognition will be symbolically represented thus:

The moment of origination = M^O
The moment of duration = M^D
The moment of cessation = M^C

Then the moment of origination of cognition of cog_1 will be written as "$M^O{}_1$", the moment of origination of cog_2 as "$M^O{}_2$", the moment of duration of cog_3 as "$M^D{}_3$ and so on.

The first point we have made is that no two acts of cognition can originate at the same time. This can be stated thus:

(i) (j) [i does not equal j iff $M^O{}_i$ does not equal $M^O{}_j$]

or simply as

(A) (i) (j) [$i = j$ iff $M^\circ{}_i \sim= M^\circ{}_j$]

Our second point may be stated as follows:

Let cog_1 be the cognition that p.
Let cog_2 be the cognition that I cognize that p.
Let cog_3 be the cognition that not-p.

Then, although (a) prevents $M^O{}_1 = M^O{}_2$, still it is necessary that

(B) $M^D{}_1 = M^O{}_2$.

The third point is to the effect that even $M^D{}_1 = M^O{}_3$ is not possible, if cog_1 and cog_3 satisfy the conditions (i) - (viii).

Finally, if conditions for both

(i) perceiving that p

and

(ii) inferring that q

are simultaneously present, then

(iii) If p = q, then the perception that p(q) will normally occur, but if p is not identical with q, then inferring that q will normally occur.

(D) Classification of Cognitions.

Cognitions are classified in different ways on different principles of classification. The first classification of cognitions is into (direct) experience (*anubhava*) and recollection (*smṛti*). (Direct) experience, again, is classified into true cognition and non-true cognition. True cognitions are classified into four different kinds–perception (*pratyakṣa*), inference (*anumiti*), comparison (*upamiti*), and testimony (*śabda*). Non-true

cognitions are classified into two kinds–doubt (*saṃśaya*) and wrong belief-episodes (*viparyaya*). Recollective cognition is excluded from true belief. True cognitions in the sense of Navya-Nyāya cannot be identified with knowledge in the Western sense of a justified true belief (since in the West "belief" is used in other senses than epistemic).

There is one more point of difference between Western theories of knowledge and the Navya-Nyāya theory of cognition. As Navya-Nyāya deals with states of cognition it uses causation to explain many points in the theory of cognition. It has been noted by Bernard Williams that the relation between propositions may be logical but the relations between beliefs about the propositions are causal.[1] As Navya-Nyāya deals exclusively with internal states of different types of cognition it uses causality among the cognitive states to explain many facts of its theory of knowledge.

(E) Some Ontological Remarks

(1) Collective and Abstract Terms

Proper, common, material nouns refer to substances. A collective noun refers to a collection of objects. But according to Navya-Nyāya philosophers a collection of objects is not ontologically a separate real over and above the objects of the collection. A collection is only an epistemic object of a cognition of a special type, called a *samūhālambana jñāna*. Although the Sanskrit term *samūhālambana jñāna* literally means a cognition which has a collection as its content, still the explanation of this cognition shows that there is no collection of objects as an ontological reality. The definition of this kind of cognition is that it is a cognition which has more than one principal qualificand. For example, the cognition of a jar and a piece of cloth has two principal qualificands, namely (i) the jar, of which the qualifier is jar-ness, and (ii) the piece of cloth, the qualifier of which is cloth-ness. But neither the jar nor the piece of cloth is a qualifier of each other nor of any other content of the cognition. So they are two principal qualificands; they are not qualifiers of anything in that cognition.

Abstract nouns do not all mean the same type of reals.

[1]Bernard Williams, *Problems of the Self* (Cambridge: Cambridge University Press, 1973), p. 141.

Abstract nouns mean that by which the contents meant by common nouns become those objects. For example, the abstract term "man-ness" (humanity) means that by virtue of which a man becomes a man, which is the universal humanity. A universal is a repeatable entity which inheres in all and only those particulars which are its instances. But not all abstract terms mean universals. For example, the term "element-ness" (*bhūtatva*) means what is common to all the elements, yet it is not a universal because that would lead to cross-classification of objects. This may be explained by considering another abstract property–being of finite magnitude (*mūrtatva*). There are five elements–earth, water, fire, air and *ākāśa*–which have the property of element-ness. Finite magnitude is present in earth, water, fire, air and an internal organ, but is not present in *ākāśa*, which is of infinite magnitude. Thus the two abstract properties, although common to many objects, cannot be regarded as universals (*jāti*) as they lead to cross-classification of objects.

It is to be noted that for cross-classification (*sāṃkarya*) it is necessary that some objects must have both the properties, and that there must be at least one object which has the one but does not have the other. It is clear that earth, water, fire and air belong to both the classes: *ākāśa* is an element but does not have finite magnitude, and an internal organ which has finite magnitude is not an element. So the two properties, element-ness and being of finite magnitude, cannot be regarded as universals proper.

There is another kind of abstract term which does not mean any common property, but means properties which are as particular as the object to which they belong. For example, the abstract term "manifested-ness" (*udbhūtatva*) means a property which differs from color to color. The manifested-ness which belongs to a white color does not belong to a blue color; the manifested-ness which belongs to a blue color does not belong to a white color. The point here is that, according to Navya-Nyāya, colors may be manifest or non-manifest. Colors belonging to the atoms or the sense-organ of vision are unmanifest and therefore cannot be perceived by the eye. Only objects whose colors are manifest are perceptible by the eye.

Thus not all abstract terms refer to the same type of reals.

(2) Adjectives

Adjectives mean objects having qualities. Thus the term

"blue" (as an adjective) means a thing having blue color. But as we have already seen, according to Navya-Nyāya philosophers there is no complex object as an independent real. There is also a Navya-Nyāya principle that a qualified entity is not ontologically different from a non-qualified, pure entity (*viśiṣṭaḥ śuddhān nātiricyate*). This principle is necessary to avoid what is regarded as the paradox of predication. For example, if we judge that the jar is blue, then the subject is the jar and when the predicate "blue" is affirmed of it the jar becomes different by becoming a blue jar. Thus predication involves a paradox:: no predicate can be affirmed of a subject without changing it ontologically. The Navya-Nyāya principle that any object remains identical with itself ontologically with or without being qualified solves the paradox of predication. The jar remains identical with itself ontologically even when it is said to be blue. The jar is identical with the blue jar.

Now the problem arises: if the blue jar is ontologically identical with the jar, how is it that we do not cognize every jar as a blue jar? This might be explained by introducing a concept of one-sided identity. A blue jar is a jar, but a jar is not a blue jar. One-sided identity is asymmetrical. This is a rather fanciful explanation. The Navya-Nyāya explanation is, rather, that when a jar is blue there are two properties which belong to the jar–jar-ness and blue-color. The jar is the substratum of these two properties and the two properties are its superstrata. The substratum has the property substratum-ness (*adhikaraṇatā*) and the superstrata have the property superstratum-ness (*ādheyatā*). The Navya-Nyāya theory is that the two superstrata have the same superstratum-ness but the substratum-nesses determined by the superstratum-ness resident in two superstrata are ontologically different. It is because the substratum-nesses are different that a jar and a blue jar have different substratum-nesses–one determined by jar-ness and the other determined by jar-ness and blue-color. Because of this the jar is not cognized as a blue jar, even though the superstratum-ness is the same in both the cases.

So the Navya-Nyāya principle that a qualified object is not ontologically different from an unqualified object means simply this: the superstratum-ness belonging to jar-ness and the superstratum-ness belonging to blue color are one and the same. The Navya-Nyāya principle keeps the possibility open for the qualified substratum-ness being different from the

unqualified substratum-ness.[1] According to Navya-Nyāya it is the qualified substratum-ness which determines the cognition of a qualified object.

(3) Kinds of Perception

According to Navya-Nyāya perceptions are primarily of two kinds: (1) construction-free (*nirvikalpaka*) and (2) construction-filled (*savikalpaka*). Construction-filled perceptions again are of two kinds: (a) ordinary (*laukika*) and (b) special (*alaukika*). Ordinary perception involves epistemic relations (*sannikarṣa*) of six types. Special perceptions are of three kinds: (1) perceptions of all instances of a universal. (ii) perception of an object by a sense-organ although the object is not a proper object of ordinary perception by that sense-organ. (i) and (ii) are common to all men. (iii) This kind of special perception is available only to yogis who can perceive very small things like atoms, distant or future things, and so on.

(a) Construction-Free Perception

In ordinary perception of the construction-filled kind we have a construction-filled cognition having a qualificand, a qualifier, and a relation between them. For example, when we perceive something as a cow or something as cow-ness-possessing, the thing is the qualificand of the perceptual cognition, cow-ness is its qualifier, and inherence is the relation (for cow-ness inheres in the presented thing). Now the Nyāya argument is that the construction-filled cognition requires a cognition of the qualifier as its cause. If a person does not know what cow-ness is, he cannot perceive something as a cow. So the construction-filled perception of something as a cow requires the prior cognition of cow-ness. But this cognition of cow-ness which produces the construction-filled cognition cannot itself be a construction-filled cognition, as this will lead to an infinite regress; so, every construction-filled perception requires a construction-free perception to stop the infinite regress. At the state of construction-free awareness of cow-ness there is no knowledge of a relation. This construction-free

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[1] "*Viśiṣṭādhikaraṇayāḥ pratītiniyāmakataivāti-prasaṅgabhaṅge ..*". Jagadīśā, *Jagadīśī-Siddhāntalakṣaṇa* on Gaṅgeśa's *Siddhāntalakṣaṇa* with the commentaries *Dīdhiti, Jāgadīśī, Vivṛti* and *Dīpikā*, edited by Guru Prasad Shastri Varanasi: Vani Vilas Prakashan, 1984, pp. 124-125.

awareness has to be perceptual, for in no other way can one initially cognize cow-ness in isolation.

This construction-free perception of Navya-Nyāya has some similarity with what Russell once called "knowledge by acquaintance", which he contrasted with knowledge by description. Knowledge by acquaintance requires a direct relation of the object with the cognizer. The Navya-Nyāya theory of construction-free perception is similar to knowledge by acquaintance in this respect. There is, however, a fundamental point of difference. While according to Russell the object of acquaintance is the referent of logically proper names like "this", "I", etc., according to the Navya-Nyāya philosophers construction-free perception of an object cannot involve words, not even proper names. This is because of the Navya-Nyāya theory that any word denotes an object or objects only under a mode which is a property of the object or objects. So a cognition involving words is necessarily a construction-filled cognition of an object possessing a property. As construction-free perception is postulated to causally explain construction-filled perception, it cannot involve any name. This construction-free cognition cannot be expressed in language, for using language is possible only when there is a distinction between the meant object and the mode under which it is meant. So Navya-Nyāya philosophers use inference to postulate this primitive kind of perception.

(b) Construction-Filled Perception

Construction-filled perception is cognition the content of which is of the form aRb. When we perceive a cow we classify what is perceived as a cow, or as cow-ness-possessing. In the cognition the perceived object is the qualificand, cow-ness is the qualifier, and inherence is the relation. What is cognized is therefore a qualified object, not a fact.

Both construction-free and construction-filled perception require the instrumentality of sense-organs. The sense-organ has to be related to the object perceived, but this relation is not merely an objective relation. It may be described as an epistemic relation, the relation of the sense-organ with the object that produces the cognition. There are six kinds of epistemic relations (*sannikarṣa*) in ordinary perception. Thus when we perceive a jar as jar-ness-possessing, the jar is the object of construction-filled perception. The sense-organ of vision is related to the jar epistemically by contact. When we

perceive the color of the jar, it is the color which is the content of perception and the sense-organ of vision has to be related epistemically to the color of the jar. This relation is a chain relation; it cannot be a direct relation. The sense-organ of vision is related to the jar by contact, and jar-ness inheres in the jar. So the sense-organ is epistemically related to jar-ness by contact-cum-inherence.

The distinction between a particular and a universal is not the same as that between a thing and a quality. According to Navya-Nyāya, qualities are as particular as the things to which they belong. So just as there are universals inhering in things–thing universals–so also there are universals inhering in qualities–quality universals.

When we perceive the universal red-color-ness our visual sense-organ has to be related to that universal red-color-ness in an indirect relation. The eyes are in contact with the jar, the red color [a quality] inheres in the jar, and red-color-ness inheres in the red color. Hence the epistemic relation of the sense-organ of vision to the red-color-ness is contact-cum-inherence.

Here we must note the difference between an objective relation of the sense-organ to the object perceived and the epistemic relation between them. When we perceive a jar the sense-organ of vision is epistemically related to the jar; yet objectively the jar is related to its red color and the red color to the universal–red-color-ness by inherence. Thus although the jar is related to all of its qualities by inherence, when we perceive the jar we do not perceive all its qualities. Thus the objective relation between the jar and its qualities does not produce the perception of all qualities of the jar simultaneously. It is a fact that a jar is objectively related to all its qualities, but this does not mean that whenever we perceive the jar we perceive all the qualities of the jar. To determine the epistemic relation between a sense-organ and the object perceived, we have first of all to note what object is perceived, a thing, its color, or the color universal, and then to calculate backward to the epistemic relation. So the epistemic relation between the sense-organ and the object perceived can be calculated only by first knowing what object is perceived.

According to Nyāya, the sense-organs are not parts of the body but are imperceptible elements (*pañca mahābhūta*). Thus the sense-organ of vision is the fire which is located in the eyeballs. The auditory sense-organ is *ākāśa*, which is imperceptible and is located in the ear-hole. According to Nyāya

sound is a quality of *ākāśa*, which is the sense-organ of hearing. Hence when we hear a sound the sound is related to the sense-organ of hearing by inherence. We may also hear the sound universal (sound-ness) present in the particular instances of sound. In hearing the sense-organ of hearing is indirectly related to it. A sound inheres in the sense-organ of hearing (*ākāśa*) and the sound-ness universal (the distinguishing property of that kind of sound) inheres in that sound. So the sense-organ of hearing is related to that sound-ness by inherence-cum-inherence.

According to Navya-Nyāya we can perceive not merely positive objects but also negative objects like the absence of a jar on the floor. Here it is necessary to relate epistemically the sense-organ of vision to the absence of jar on the floor. First of all the sense-organ of vision is related to the floor by contact, and the absence of the jar is the qualifier of the floor. Hence the sense-organ of vision is related to the absence of the jar on the floor by the relation of contact-cum-qualifier-ness.

(c) Special Perception

Among systems of Indian philosophy only Navya-Nyāya admits this type of perception. There are three kinds of special (*alaukikasannikarsā*) perception.

(i) The first kind of special perception is the perception of all instances of a universal. When we perceive an elephant, we also perceive ordinarily the universal elephant-ness inhering in the elephant. These are all cases of ordinary perception. But Navya-Nyāya philosophers argue that by perceiving one elephant as possessing elephant-ness, we perceive in a special way all instances of elephant-ness, i.e. all elephants, past, present and future, near and far. When we perceive one elephant we have perceived all elephants merely as elephants. This is why when we see a second elephant we at once recognize it as an elephant. But recognition would not be possible if we had not already known elephants. It is the first time that we are seeing the second elephant–how can we recognize it as an elephant? According to Navya-Nyāya philosophers this experience of recognition can be explained only if we hold that by perceiving one elephant in the ordinary way we have perceived in a special way all elephants.

The Navya-Nyāya theory of perceiving in a special way all instances of a universal by perceiving the universal in the ordinary way in one instance of the universal avoids a difficulty

in the conceptual theory of universals According to this theory we perceive a number of elephants, then compare and contrast these perceived particulars, and then abstract the qualities common to all of them, and then generalize to form the concept of the universal elephant-ness. A difficulty in this theory of abstract universals is that we shall have to perceive many elephants. As we have at the outset not yet got the universal elephant-ness, it is not clear how we can be sure that we are seeing a second elephant. Without having the universal we cannot possibly recognize a second elephant as an elephant. By assuring that when we perceive the first elephant we also perceive the elephant-ness present there, the Nyāya theory of this kind of special perception explains how we can recognize a second elephant as an elephant. Hence the need for this special kind of perception.

Even though this is a special kind of perception it is common to all men. It is not a privilege enjoyed only by a fortunate few.

Every perception requires an epistemic relation between the sense-organ and the object perceived. In this kind of special perception of all instances of a universal, it is the ordinary cognition of the universal which functions as the epistemic relation. The universal is actually perceived in the instance presented here and now, and this universal is presented not only in this object but in all its instances. So the ordinary perception of the universal functions as the epistemic relation between the sense-organ and all instances of the universal. As this epistemic relation is not an ordinary kind, it is regarded as of a special or extraordinary (*alaukika*) kind.

This kind of special perception is used in Navya-Nyāya to explain the perception of the invariable concomitance of smoke and fire. No one can see all cases of smoke, or all cases of fire. Then how can one know, as one actually does, that all cases of smoke are related in the appropriate manner to fire? The reply is that by seeing one case of smoke, one ordinarily sees smoke-ness, which inheres in all cases of smoke. In this special sense, one sees all cases of smoke, which explains the possibility of perceiving the invariable concomitance of smoke with fire. We shall explain later why Navya-Nyāya philosophers cannot admit inductive inference.

(ii) The second kind of special perception is the perception of objects by a sense-organ even though the objects are not the proper objects of perception by the sense-organ.

As an example we may take the visual perception of a piece

of sandalwood as fragrant. Fragrance is not an object of visual perception. Yet when we see a piece of sandalwood we see it as fragrant. This is possible only if we had smelt a piece of sandalwood when we saw one before. It is the memory of the fragrance which functions as a very special kind of epistemic relation between the sense-organ of vision and the fragrance. It will not do to say that we see the piece of sandalwood and remember that it is fragrant. Yet we experience the piece of sandalwood as fragrant. To explain this experience it is necessary to postulate this kind of perception.

There are five other cases in which this kind of special perception is used in Navya-Nyāya to explain various types of experience.

(a) The first case is of recognition. We saw Devadatta before; when we see him now we recognize him to be that person. The recognition is perception and it takes the form "this is that Devadatta". Now in this recognition the memory of Devadatta whom we saw before functions as the epistemic relation to produce this perception.

(b) According to Nyāya, we can know one cognition of an object through a higher-order introspective cognition. The content of this higher-order introspective cognition of a cognition has the form "I am aware of the jar". When I perceive the jar I am aware only of the jar, but not of my perceiving it. If I have to know my perception I have to perform a higher-order introspective act. This introspective act has as its content the first-order act. Yet the first-order act cannot be cognized in a second-order act unless and until the content of the first-order act is also cognized.

The second-order act cognizes the first-order act and also the object of the first-order act. This is possible only if we hold that the content of the first-order act becomes the content of the second-order act. As the second-order act is introspection or inner perception it perceives the content of the first-order act only insofar as it is cognized in the first-order act. Here the epistemic relation between the second-order inner perception and the content of the first-order act is the first-order act of the cognition itself. So in this case also a cognition becomes the epistemic relation between the inner perception and the content of the first-order perception. This is perception of a special kind.

(c) The third case of this type of epistemic relation is in explaining an illusory perception. When, for example, we mistake a piece of rope for a snake not present here and now,

we do not mistake the piece of rope for an idea or a memory of a snake: we perceive a snake which is not here and now. But how can the sense-organ of vision be related to a snake which is not here and now? According to Nyāya, the epistemic relation between the sense-organ of vision and the absent snake is through the memory of a snake seen in the past. Here too it is a memory which functions as the epistemic relation between the sense-organ of vision and the absent snake.

(d) In the case of the perception of an absent object, the sense-organ has to be epistemically related to the object. For example, when we perceive that there is no jar on the floor, we have to have cognized a jar before. This memory of a jar seen before becomes the epistemic relation between the sense-organ of vision and the jar. We cannot perceive simply absence: the absence has got to be the absence of something. Even though the absence is before our eyes, the jar which is absent is not. Yet unless and until we can see a jar we cannot see the absence of that jar. Here too the memory of the jar functions as the epistemic relation between the visual sense-organ and the absent jar.

(e) Navya-Nyāya philosophers hold that the meaning of a word may be known in different ways. One way to identify an object as the meaning of a word is based on the cognition of similarity (*upamiti*). For example, a forester tells a city-dweller that a *gavaya* is similar to a cow. When that man goes to the forest and perceives an animal similar to a cow he knows that the meaning of the word "*gavaya*" is any animal of this kind. Now the problem is that the person has to see the similarity between the *gavaya* which is present and the cow which is absent. How can one perceive the similarity between a present and an absent thing? According to Nyāya philosophers, the perception of similarity requires perception of the two objects which are similar. As the *gavaya* is present there is no difficulty in explaining how it can be perceived. But how can an absent cow be perceived? It is not ordinary perception, for it is the memory of a cow seen before which functions as the epistemic relation between the visual sense-organ and the absent cow. So this perception of similarity between a present thing and an absent thing is of a special kind.

(iii) The special perception of this kind is not common to all individuals but is the prerogative of yogis. Yogis can "see" small things like atoms, distant and past and future things which cannot be perceive normally. But perception, according to

Nyāya, requires an epistemic relation between the sense-organ and the object perceived. In the case of yogic perception the epistemic relation is the special cognition in the mind resulting from yogic exercises.

In all these forms (i)-(iii) of special perception the epistemic relation between the sense-organ and the object perceived is very peculiar. In all these three cases it is cognition of a sort that functions as the epistemic relation. In case (i) it is the perception of the universal in the ordinary way which functions as the epistemic relation between the sense-organ and all instances of the universal. In case (ii) it is sometimes memory and sometimes informative knowledge which functions as the epistemic relation. This has been explained above in detail. In case (iii) it is the knowledge resulting from yogic practices which functions as the epistemic relation between the sense-organ and the object perceived. In emphasizing the instrumentality of a sense-organ in all forms of perception, ordinary or special, Nyāya philosophers go against the Yoga theory of Patañjali. According to Nyāya a blind man cannot see anything, even by yogic exercises. For seeing, the function of the visual sense-organ is essential. Thus a blind yogi cannot see God, though he may have other kinds of perception of God determined by two independent mode-nesses resident in two unrelated modes.

(d) Cognition of Qualified Qualification

This type of cognition is a very complex type. A simpler form of cognition is construction-filled cognition. For example, if I see a jar as a jar then the jar is the qualificand, jar-ness (a universal) is the qualifier, and inherence is the relation. This perception is construction-filled; I have cognized an object as having jar-ness and have classified the object as a jar. In this construction-filled perception a relation is cognized, and as the relation is dyadic, there are two terms: the qualificand is the first term (*anuyogin*), the qualifier is the second term (*pratiyogin*). In construction-filled cognition, the cognition of the qualifier is necessary as a cause. If the class character jar-ness (a universal) is not cognized, it is not possible to classify a given object as a jar. The universal jar-ness is cognized in and through itself, without the help of any qualifier. This cognition of the universal jar-ness is called "construction-free perception", which is the simpler form of cognition.

In the more complex, construction-filled, type of cognition

one cognizes, for example, a red-stick-possessing man. In this type of cognition a qualifier (the stick) is itself qualified by red-color. So red-color is a qualifier_2 of the stick which is a qualifier_1 of the man. In such a case the red-color is called a "limiter" of qualifier_1-ness. In cognition of qualified qualification a cognition of the limiter of qualifier_1-ness is necessary as a cause. This cognition of the limiter of qualifier_1-ness must be a mode of the cognition which causes the cognition of the qualified qualification. If the red-color, which is the limiter of the qualifier_1-ness resident in the stick, is a mode of a cognition, then there must be a qualificand of this cognition. This qualificand is the stick which is qualified by the red-color. Thus the stick is the qualificand of the red-color and is, at the same time, a qualifier_1 of the man.

Here, one cognizes a relation (contact) between the red stick and the man. As this relation is dyadic, there is a first term, the man, and a second term, the red stick. This cognition is complex, because the second term is itself a qualified object, e.g., the stick qualified by the red-color.

Def. 1 of "qualified qualification": That cognition in which the second term is itself a qualified object.

But this definition is not satisfactory. For, when one illusorily perceives a man possessing a red stick when the stick is not really red, then the second term of the relation of contact between the stick and the man cannot be a qualified object, a stick qualified by a red-color, for if the stick is not really red, the stick cannot be really qualified by a red-color.

Yet this is a case of cognition of qualified qualification because this illusory perception is caused by the illusory cognition of a red stick in which the red-color is the limiter of qualifier_1-ness. Thus Def. 1, since it does not apply to this case, is inadequate (too narrow).

Def. 2 of "qualified qualification": The cognition of qualificand-ness determined by qualified mode-ness.

In the cognition of a red-stick-possessing man, the man is the qualificand and has qualificand-ness. This qualificand-ness is determined by the qualified mode-ness present in the red stick. So this cognition is of qualified qualification.

But Def. 2, too, is not acceptable. For, just as the cognition of a red-stick-possessing man is the cognition of a qualified qualification, so also the illusory perception of a hill possessing golden fire is a case of a cognition of qualified qualification. And yet the definition does not apply in this case, for the

principle qualificand (the hill) has as its mode fire. But this cannot be qualified by gold (or, by being golden). So this definition is too narrow.

Def. 3 of "qualified qualification": The cognition of an object which is its mode, which again has an object which is cognized as the qualifier of the mode.

But Def. 3 is also not faultless. For although this definition can explain how the cognition of a red-stick-possessing man is a case of cognition of qualified qualification, it cannot explain the difference between this complex cognition and the collective cognition that the stick is red and the man possesses the stick. For in this collective cognition the red-color is the mode of the stick and such a stick is the mode of the man. But a case of collective cognition is not a case of cognition of qualified qualification. So, as Def. 3 applies to this collective cognition, it is too wide.

Def. 4 of "qualified cognition": That cognition which has as its mode something which is limited by qualificand-ness determined by the mode-ness resident in a different qualifier.

Def. 4, too, is not justified. For the cognition of a red-stick-possessing man can be caused in two ways–(i) by cognition of the qualified qualification, and (ii) by cognition caused by a qualificand qualified by a qualifier, and this qualifier, too, qualified by a second qualifier. In (ii) we have the cognition of the man possessing the stick and the stick possessing a red-color. In this way one can have the cognition of a man possessing a red stick. But this cognition is caused by the presence of all the separate objects–red-color, stick and man. All these objects are cognized in a collective cognition.

Def.5 of "qualified cognition":The cognition having the limiter of qualifier$_1$-ness as the mode of qualifier$_1$, yet belongs to the principal qualificand by an indirect relation.

This indirect relation is a chain relation. In the cognition of a red-stick-possessing man, the red-color is a qualifier of the stick by a direct relation, inherence. Now this red-color is the limiter of qualifier$_1$-ness. The stick is the second term of the relation of contact between the man and the stick. The stick, here, is the second term *(pratiyogin)* of the relation of contact. That is, contact is the relation which makes the stick the second term. So, we have a red-color as the limiter of the property of being (a) second term (*pratiyogitā*) resident in the stick. The relation which makes the stick the second term is contact. Therefore, the

red-color belongs to the man by a very indirect relation–the relation which controls the property of being the second term (*pratiyogitā*) which is limited by red-color (which is the limiter of the *pratiyogitā* resident in the stick.

III. Theory of Inference

We shall note here a few general features of the Navya-Nyāya theory of inference.

(i) Two forms of immediate inferences are admitted in traditional Western logic: (a) immediate inferences like obversion, conversion, etc. and (b) immediate inference from opposition of propositions. In Indian philosophy in general and Navya-Nyāya in particular, inference is conceived as mediate inference; there does not appear to be any process corresponding to obversion, conversion, etc. There is no immediate inference from opposition of propositions, but Navya-Nyāya philosophers have a theory of blocking of cognition of certain types of proposition. We first explain why immediate inferences of type (i) are not admitted in Navya-Nyāya philosophy.

(a) There is no process corresponding to obversion in Navya-Nyāya philosophy, presumably because the negative particle always attaches to a term but never to a copula. Thus there is no difference between "S is not P" and "S is not-P", the first being interpreted only as the second. But obversion requires a difference between a negative particle attaching to the copula and to the predicate term. From "All S is P" we have by obversion "No S is non-P", where "non-P" and "no" are both necessary. As in Navya-Nyāya philosophy (i.e., in proper Sanskrit) we cannot have both in the same sentence: obversion as a process of inference is not possible. What is there, instead, is the problem of double negation of a term: whether not-not-jar is the same as jar, but this is not a process of obversion.

Conversion is not possible in Navya-Nyāya theory because it requires use of the sign of quantity of propositions, like "all", "some", "no" and so on. But in Navya-Nyāya philosophy words of quantity are not generally used; quantification is achieved only through a mode of presentation of objects denoted by the subject and the predicate term. What is discussed in detail in Navya-Nyāya philosophy is the relational converse of propositions.

(b) Instead of opposition of propositions, there is in Navya-Nyāya a theory of blocking of cognitions. Navya-Nyāya

philosophers hold that if p is true, then not-p is false but that this is not inference; they also hold that a belief in p blocks a belief in not-p.

(ii) The distinction between formal truth and material truth, so commonly made in Western philosophy, is not made in Indian philosophy. An inference which is formally valid but not materially true is not admitted in Navya-Nyāya, for it is not a form of knowing (i.e., true cognition).

(iii) There is also no concept of inductive inference, a form of inference in which from a particular premise a universal conclusion is drawn. There is, of course, an important problem of explaining how generalization is possible, but there is no problem of proving a universal conclusion on the basis of facts of observation. The Navya-Nyāya theory of the process of generalization will be discussed in detail later.

(iv) There does not appear to be any propositional logic, i.e., a theory of inference in which unanalyzed propositions are used as units of analysis instead of terms. Thus Bochenski is right when he says "Indian logic seems to be almost entirely lacking in propositional logic". Although Indian logic is a logic of terms, yet these terms are not the major, middle and minor terms of the traditional theory of syllogism. This is so not merely because terms in traditional logic are often regarded as linguistic (grammatical) entities, while in Indian logic in general, they are always non-linguistic entities which the expressions refer to, but also because in Indian logic even the so-called subject predicate judgments (propositions, sentences, etc.) are regarded as relational. Moreover, the Navya-Nyāya theory has a completely different method of analysis or decomposition of cognized relational structures in order to obtain the "terms" of inferences. This method of analysis will be explained in detail later.

(v) In Indian philosophy in general, and Navya-Nyāya in particular, inference is conceived as a way of knowing a truth on the basis of some known truths. Inference being essentially a way of knowing, substitutivity of identity does not hold in inference.

(vi) There is a distinction which is considered very important by all schools of Indian philosophy but which seems to be absent in Western philosophy. This distinction is between inference for one's own sake and inference for the sake of others. This is especially important for Navya-Nyāya, because according to it inference for one's own sake does not involve any language. Language is necessary only for communicating an inference to others who can then perform for themselves the act of drawing the same conclusion. There is a formal difference corresponding to this difference in purpose. When one infers for one's self one does not use any language; it is a process of knowing which involves four steps. When one communicates one's inference to others, one has to use a sentence having five part-sentences which do not correspond to the four steps of inference for one's own sake.

There are many scholars who are of the opinion that the terms "*svārthānumāna*" ("inference for one's own sake") and "*parārthānumāna*" ("inference for the sake of others") were originally used by Buddhist logicians. In later years all schools of Indian philosophy borrowed these terms, but gave different meanings to them to suit their own theories. It is to be noted, however, that Praśastapāda (*circa* 650 A.D.) used the term "*parārthānumāna*", either borrowing the term from the Buddhists or creating it on his own. Although the Buddhists use the terms extensively in their logical writing, they term may have already been in use. It is not clear who created the terms originally.

(vii) The most important point of difference between modern Western logic and the Navya-Nyāya theory of inference consists in this: that inference, according to Navya-Nyāya philosophers, is a process of cognition causally determined by other cognitions of a certain type; there is no concept of logical rules according to which inferences are drawn. But the causal determination of inferential cognition is based upon forms of contents of cognition. In what follows we shall distinguish between different types of inference admitted by Navya-Nyāya philosophers by the contents cognized in the different steps of the inferential cognition for one's own sake. Although Navya-Nyāya does not use symbols, yet in our presentation of the Navya-Nyāya theory of inference we shall use symbols, especially of first order quantificational logic with identity, and represent the different types of inference as examples of different rules of inference. Thus our presentation will be doubly inadequate, for the Navya-Nyāya theory does not use symbols and quantification theory in the Western sense. Instead, the function of quantification is performed by the Navya-Nyāya concept of limiter (*avacchedaka*) which is a concept of epistemic logic. Thus the Navya-Nyāya theory of inference is really a theory of epistemic acts or episodes and is

fundamentally different from Western epistemic logic, which uses epistemic words like "believe", "know", etc. in the dispositional sense.

A. Structure of Inference

(1) Navya-Nyāya Inference for One's Own Sake

Inference is a form of mediate knowledge, of knowing something by knowing something else. We first show, as literally as possible, how an inference for oneself as a process of knowing is expressed in Sanskrit. We shall need to show two forms of expressions stating an inference. A stock example of the first form is:

Inf. N-N 1. (The) hill (is) fire-possessing, because of (the reason being) smoke.

(In Sanskrit there are no articles, definite or indefinite, and the "is" is usually omitted; hence we show it in parentheses.) The sentence

(a) (The) hill (is) fire-possessing

expresses the conclusion; the expression

(b) because of smoke

states the reason (*hetu*)..

From the conclusion two terms are determined, (i) the *pakṣa* (*p*), which is the first term of the conclusion, corresponding to the minor term of the traditional Western syllogism; and (ii) the *sādhya* (*s*), which is the second term of the conclusion, roughly corresponding to the major term of the traditional Western syllogism. There is no problem of determining the *p* and the *h* of an inference; they are explicitly stated. In Inf. N-N1 the *p* is (the) hill (not "hill"), and the *h* is smoke. But there is a problem in the case of the *s*, for it is not explicitly stated. To understand this problem we have to consider another type of inference. An example is the following:

Inf. N-N2. This (is) fire, because of heat.

Here the sentence

(a) This (is) fire

is the conclusion, and the expression

(b) because of heat

states the reason, identifying the *h*.

It is important to note the difference between Inf. N-N 1 and Inf. N-N 2. In N-N 1 there is a suffix "–possessing" ("*–vat*") added to the word "fire", whereas in N-N 2 this suffix is absent. For determining the *s* of an inference Navya-Nyāya gives the

following rule of thumb:

Rule N-N 1: To determine the *s* of Inf. N-N 1 (i) drop the suffix "–possessing" when it occurs in the second term of the sentence expressing the conclusion; and (ii) add the suffix "–ness" to it when the suffix "–possessing" does not occur.

In Inf N-N 1, in the verbal expression of the conclusion, the second term is "fire-possessing". To determine the *s* in this inference, the rule says that we have to drop this suffix: So we get the word "fire". Thus the *s* is what is denoted by the word "fire", i.e. fire (not the word "fire").

In Inf N-N 2, the second term of the conclusion-sentence is "fire", which does not have the suffix "–possessing". To determine the *s* of this inference, the rule says that we have to add the suffix "–ness" to this word. Thus we get the word "fire-ness". The *s* is what the word "fire-ness" stands for, i.e. the property of being a fire (but not fire nor the word "fire-ness").

Thus, although the concept of a copula is absent in Indian logic, still if the tripartite division of sentences into subject, predicate and copula is accepted, Rule N-N 1 has the effect of making the verb "possess" or "have" the copula.

The conclusion of an inference is a cognition of the form "*p* possesses *s*". It is necessary that *s* be cognized prior to the cognition of the conclusion, for the conclusion is a construction-filled cognition caused by a cognition of the qualifier. As in the cognition which is the conclusion of an inference the *s* is the qualifier, it has to be cognized prior to the conclusion.

It may be argued that in the cognition of a pervasion, where *h* pervades *s*, *s* is cognized already prior to the cognition of the conclusion. Against this, an opponent may point out that the cognition of pervasion is a cause of the conclusion of an inference as cognition of pervasion, not as cognition of the *s*. In reply to this argument of the opponent it may be said that the cognition of pervasion is not possible without a cognition of the *s*, for pervasion is a relation between an *h* and an *s*. But this reply also cannot be accepted, for then the prior cognition of *s* is a cause of the cognition of pervasion, thus is a cause of a cause of the conclusion, hence cannot be a cause of the cognition which is the conclusion. That is why even without the cognition of the *s* the conclusion follows immediately from the cognition of pervasion. Pervasion is the relation between the pervader and the pervaded: the pervader need not be known as the *sādhya*.

To this argument of the opponents, the Nyāya philosophers

reply that the cognition of pervasion is also the cognition of the *s*; the cognition if the *s* is not different from, is not a cause of, the cognition of pervasion. As there cannot be any inference without a cognition of pervasion, that very cognition is the prior cognition of the *s* which is necessary as the cognition of the qualifier of the conclusion.

There is, however, a group of Nyāya philosophers who argue that, although the cognition of the *s* as the cognition of a qualifier is necessarily cognized prior to the conclusion in some cases of inference, this is not so in all cases. In some cases, these Nyāya philosophers argue, the cognition of the qualifier is not a cause of the construction-filled cognition which is the conclusion. There is a type of inference admitted in Nyāya where the conclusion is a negative cognition. For example, in the inference

Inf E: Earth is different from non-earth, because of smell there cannot be any positive pervasion such as wherever there is smell there is difference from non-earth, for all earth being the locus of inference, all instances of earth are doubtful cases of the *s*–here, difference from non-earth. Every cognition of pervasion requires a non-doubtful cognition of at least one instance of the co-presence of the *h* and the *s*. In Inf E, all instances of earth being doubtful instances and smell being present only in earth, there cannot be any cognition of non-doubtful co-presence of smell with difference from non-earth. In such a case the pervasion is purely negative: wherever there is absence of the *s* there is absence of the *h*. Now in this case, therefore, the negation of difference from non-earth is pervaded by the negation of smell. But negation of difference is not the counterpositive of the difference, but rather the limiter of the counterpositive-ness resident in the counterpositive of the difference. Here the counterpositive of the difference is non-earth, so the negation of the difference is non-earth-ness. Hence in the cognition of pervasion, which has to be negative in this case, the *s* is not cognized. So the rule that a cognition of the qualifier is a cause of the cognition of construction-filled cognition cannot be accepted as a universal rule.

The point may be explained in this way, by reconstructing the original inference thus:

(1) Wherever there is non-earth-ness, there is absence of smell;
(2) Earth has smell (absence of absence of smell);
(3) Therefore, earth has absence of non-earth-ness.

Now, *a* has absence of *b*-ness if and only if *a* is different from *b*. Earth has absence of non-earth-ness if and only if earth is different from non-earth, which is the original conclusion. But the point is that earth, which appears in the conclusion, is not cognized in the premisses. So, according to this school of Navya-Nyāya, a prior cognition of the qualifier is not necessary in every case of construction-filled cognition.

This is a negative (or "only-negative") inference (*kevalavyatirekin anumāna*). There is another form of inference which is "only-positive" (*kevalānvayin anumāna*). Here is an example:

This jar possesses nameability, because of (its)knowability. The pervasion is: whatever possesses nameability possesses knowability, i.e., nameability is pervaded by knowability. But here there cannot be any negative example, for there is nothing which has absence of knowability. Everything is knowable (at least by God, who is omniscient), and everything is nameable (at least by God, who knows everything by its name).

In the ordinary kind of inferences there are both positive and negative examples–for example, (the) hill possesses fire, because of smoke: here the pervasion has both positive and negative example, kitchen being an example of positive pervasion where fire and smoke are found, and a lake a negative example, viz. a place where both fire and smoke are absent. This kind of inference is both positive and negative (*anvayavyatirekin anumāna*). This kind of inference is different from the other two–one where there can be no positive example, and the other where there can be no negative example.

The so-called five marks of a good *h* are:

(1) its presence in the *p* (*pakṣe sattvam*);

(2) its presence in something (else) known to possess the *s*-property (*sapakṣe sattvam*);

(3) its absence from something which is known to possess absence of the *s*-property (*vipakṣe asattvam*);

(4) there being no (other) *h* proving the conclusion (*asatpratipakṣa*);

(5) the conclusion being uncontradicted by any other form of knowledge (*abādhitatva*).

Of these five marks of a good *h*, (4) and (3) are not possible in the two extraordinary forms of inference. In only-negative inferences, (2) is not possible, as we have already seen. In only-positive inferences (3) is not possible. Only in ordinary

(positive-negative) inference are all the five marks present in a good *h*.

B Pervasion

(1) Pervasion and Generalization

Pervasion has been represented uniformly as universally quantified assertion, yet according to Navya-Nyāya not all types of pervasion involve generalizations from observed facts. Navya-Nyāya distinguishes between three different types of cases of pervasion.

(i) There is a type of inference in which we infer the presence of an individual quality or property present in a particular thing on the basis of the presence of another individual quality present in the same thing. For example, when we infer that this fruit has this color because it has this particular taste (*etadrūpavan-etadrasāt*), both the *h* (the taste-particular, this taste) and the *s* (this color) are particulars which can be present in only one thing, namely, this particular piece of fruit. This color, i.e. the color individual, which is present in this fruit is not the same color-individual present in another object, though both these colors may be of the same kind, say, red, even exactly the same shade of red. So also with the taste, which is a particular and can belong only to this piece of fruit. The relation of pervasion underlying this inference can be stated thus:

whatever has this taste has this color.

But although it is stated in the form of a universal propositions, there is no generalization here from observed cases to unobserved cases. So only one object has to be observed in order to cognize the relation of pervasion between its two qualities. This one observation of the concomitance of two particular qualities of one object is both necessary and sufficient to establish the relation of pervasion between the *h* and the *s* of the inference.

(ii) A second type of inference, too, has a single object as *h* and another single object as *s*, for example, when we infer the universal substance-hood from the universal pot-ness. This will be the case, generally, where the *h* and the *s* are both universals. The pervasion underlying this type of inference will be a relation between two objects, and one observation is both necessary and sufficient to establish the pervasion.

(iii) The third variety of inference is the usual one, for example, where we infer the presence of fire somewhere on the basis of the presence of smoke there. Here smoke is the *h* and fire the *s*, and the relation between smoke and fire is the pervasion. But as both "smoke" and "fire" are general terms, they refer to many particulars in different places. The pervasion "wherever there is smoke there is fire" does involve a passage from observed cases to unobserved cases.

Now we can see the difference between (ii) and (iii). In a case of the type (iii) the *h* and *s* are denoted by general terms whereas in cases of type (ii) they are denoted by singular abstract terms. Therefore the *h* and *s* in cases of this type are single objects. It is only in cases of type (iii) that generalization is involved, which is the source of many different types of problems.

(2) The Possibility of the Psychological Process of Generalization

(a) The Pūrva-Mīmāṃsā Theory

The Mimaṃsakas assert that we need repeated observations to be able to generalize. It is not enough that we perceive that both smoke and fire are present in one instance: we have also to perceive many such instances. This is because even though we perceive smoke and fire together in one place, we still have doubts about their being together in other places. When we find that smoke and fire are co-present uniformly in all instances which we have observed, we become convinced of the invariable concomitance of smoke with fire. This corresponds roughly to Mill's method of agreement.

The Naiyayikas, however, find this theory unsatisfactory for the following reasons. (a) The term "many observations" is ambiguous. It may mean (i) "observation of many loci of the *h* and the *s*", or (ii) "observation of many loci of many individual *hetus* and *sādhyas*", or (iii) simply "many observations". But in none of these can the term "many observations" explain how pervasion is cognized in all type of cases. For example, if we accept sense (ii), then we cannot explain how we cognize pervasion in case (i) (for the reason stated), and also in case (ii), where the *h* and *s* being universals are single objects, there cannot be "many" individual *hetus* and *sādhyas*. This is the real difference between case (i) and case (ii). Sense (iii) is very vague, as it does not say how many observations are necessary for generalization, or how long one should continue observing.

If we accept sense (iii), then we cannot explain why, in spite of repeated observation of concomitance of two objects in case (iii), we do not generalize always, in every case, i.e., do not always cognize that they are invariably related. This leads us to the main objection of the Navya-Nyāya philosophers to the Pūrva-Mīmāṃsā theory.

(b) The Navya-Nyāya Theory

This theory is based on a theory of blocking of cognitive acts by other cognitive acts. To explain how pervasion is cognized with certainty in case (iii), we have to take into consideration the presence or absence of doubt on the part of the cognizer. Skeptical philosophers like the Cārvākas argue that we can never be sure that the unobserved cases will be like the observed ones. If one has doubt of this sort, then the presence of this doubt will prevent him from generalizing with certainty even after repeated observations of uniform concomitance. If, on the other hand, one is naive and credulous, i.e. does not suffer from any disabling constraints, he will acquire certainty by observing even one favorable instance. For acquiring a sure cognition of pervasion involving generalization, therefore, two conditions are to be fulfilled:

(x) The cognizing subject must be free from doubt that the *h* may be a deviating *h*, i.e may be present where the *s* is absent.

(y) The subject must have observed the concomitance of *h* and *s* in at least one instance.

Now we shall explain how these two factors yield the psychological possibility of generalizing with certainty. The logical problem of induction can be raised only after this psychological question has been answered. If one never actually generalizes with certainty, the question whether he is logically justified in so generalizing does not arise at all. If no one actually generalizes from observation of some positive instances, then the logical question whether one could justifiably so generalize would be an empty question. So Navya-Nyāya first examines the possibility of generalization.

Navya-Nyāya develops an elaborate theory to explain how doubt about the truth of a general statement even after repeated observation of uniform concomitance of *h* and *s* prevents one from generalizing with certainty. In this theory, Navya-Nyāya uses its concept of causal factors. According to Navya-Nyāya philosophers, whenever anything is produced,

there are two types of causal factors, positive and negative. A positive causal factor is that the presence of which is necessary, and a negative causal factor is that the absence of which is necessary, for the production of the effect. If a negative causal factor is present in a given case, then the effect is prevented from coming into being, and so the presence of a negative factor is called a preventer (*pratibandhaka*) of the effect. Now applying this theory to the production of cognitive events, Navya-Nyāya philosophers distinguish between two different sorts of preventers. (i) There are some factors like emotional disturbance which act as preventers to all cognitions. In this type of blocking, the inner state of a person, by its mere existence, prevents the subject from believing. For example, the excessive love of a fond mother for her son will prevent her from believing any bad report about him. This type of blocking is psychological and Navya-Nyāya philosophers are not very much concerned with this sort of blocking. (ii) Rather, they are interested in a different type of blocking, the blocking of one cognitive state by another in virtue of their contents. Thus if a man is skeptical by nature, then he will not be able to believe anything, not merely a particular case of pervasion. But what prevents one from believing in a particular generalization is not one's mental make-up, but it is the fact that he has a particular doubt, e.g., the doubt that the *h* in this case might be a deviating one. Pervasion and deviation are logically contradictory, and a cognition of deviation, even though it may be of the nature of doubt, prevents the perception of pervasion. The generalization will be logically justified, according to Navya-Nyāya philosophers, if no doubt whatsoever about deviation can arise at all. To explain how this is possible, Navya-Nyāya philosophers have developed their theory of *tarka*.

(c) The Navya-Nyāya Theory of *Tarka*

For deciding whether one can have any doubt that a particular *h* is a deviating one, the Navya-Nyāya philosophers have a type of argument with a counterfactual premiss. As this type of argument is of a very special type, we shall explain its essential features by examining the stock example of pervasion of smoke by fire.

The pervasion in this example may be stated thus: "smoke is pervaded by fire", or "wherever there is smoke there is fire", or "in every locus of smoke, fire is present". If we have a doubt

which prevents us from believing in this pervasion, then this doubt will be that fire may be absent from a locus of smoke, i.e. that smoke may deviate from fire. The doubt in this case is resolved by appealing to a more fundamental relation between smoke and fire, namely, the causal relation. This may be compared with Mill's theory that induction is based on the law of uniformity of nature and the law of causation. But the argument which proves the pervasion of smoke by fire on the basis of their causal relation is, according to Navya-Nyāya philosophers, of a peculiar nature: it is not deduction or even inference. Thus, the Navya-Nyāya theory is different from the theory of some Western philosophers that induction is nothing but deduction with the law of uniformity or the law of causation as the major premiss.

The nature of the Navya-Nyāya form of argument involving *tarka* may be explained by contrasting it with ordinary inference.

N-N Inf. (1) Smoke is pervaded by fire.
(2) The hill possesses smoke.
(3) The hill possesses smoke pervaded by fire.
(4) Hence, the hill possesses fire.

N-N Arg (Tentative form:)
(5) Deviation from fire is pervaded by the absence of being caused by fire.
(6) Smoke possesses the property of deviating from fire.
(7) Smoke possesses deviation from fire pervaded by the absence of being caused by fire.
(8) Hence, smoke possesses the absence of being caused by fire.

But (8) is unacceptable to both the parties of the argument—the proponent and the opponent–for both have accepted that smoke is caused by fire. The difference between N-N Inf. and N-N Arg. consists essentially in this: that if we believe with certainty that the hill does not possess fire, Inf. will not be possible, whereas unless the contradictory of the conclusion (8) is accepted by both parties, Arg. will not be possible. Firm belief in the contradictory of the conclusion is an impediment to inference, but is necessary for *tarka*. The reason for this fundamental difference between Inf. and Arg. is obvious. In Inf. the conclusion has to be asserted, i.e. to be cognized with firm belief. But if the contradictory of the conclusion is firmly believed, then anyone who has this belief will be prevented from asserting the conclusion (4). But it is essential for *tarka* that the contradictory of the conclusion is cognized with belief. Now when one believes that the contradictory of a certain proposition is true, then he can, at best, entertain the proposition itself without believing in it for a moment. Such a cognition with full realization that what is cognized is disbelieved is called an *āhāryajñāna*, i.e., a supposition contrary to belief. Thus *tarka* will have to be put in the form of a counterfactual hypothesis. This form will be:

N-N Arg.*
(5*) Deviation from fire is pervaded by absence of being caused by fire.
(6*) If smoke deviated from fire, then it would not have been caused by fire.
(7*) But smoke is caused by fire.
(8*) Hence, smoke cannot deviate from fire.

Thus the doubt is resolved.

Against the opponent, the proponent argues that if smoke deviated from fire it would not have been caused by fire. If anyone were to assert that smoke deviated from fire, he would have to accept that smoke is not caused by fire–a position not acceptable to the opponent as well as the proponent. So when the opponent admits that smoke is caused by fire, he cannot also doubt that smoke may deviate from fire.

Thus every *tarka* is based on a pervasion, for example, (5*) of Arg.*. Can that pervasion in its turn be doubted? The answer, it appears, must be in the affirmative, for we can surely doubt whether deviation of fire is really pervaded by absence of being caused by fire. But this doubt will not arise, for it follows from the very concept of cause and deviation that if one thing deviates from another, then the first thing cannot be caused by that other. The causal relation guarantees uniformity of agreement in presence and absence. Thus anyone who accepts a cause as a necessary and sufficient condition for the production of the effect does not have the option to doubt that the effect (here smoke) may deviate from the cause (fire).

Thus although (5*) cannot be doubted by anyone who has accepted (7*), what happens if one doubts (7*) itself, i.e. doubts whether smoke is really caused by fire? One immediate consequence of this further doubt will be that Arg.* will not be possible against him, for step (7*) will not be available now. How is one to remove this doubt, which will inhibit the psychological process of generalization, and hence the cognition of pervasion?

The Navya-Nyāya procedure in such a case is to show that such a doubt cannot be seriously held at all. Doubt that smoke may not be caused by fire may take one of the following three forms: (i) smoke is perhaps produced only when fire is absent, (ii) perhaps smoke is produced in some cases without fire, and (iii) perhaps smoke is not produced at all by any cause. But none of these doubts can arise. The Navya-Nyāya theory is that one cannot even start doubting that smoke may not be caused by fire, for this doubt is blocked, i.e., prevented from arising, by belief in the agreement in presence and the agreement in absence of smoke and fire, and everyone has that belief. If one persists in maintaining that even though one believes that there is uniform agreement in presence and absence of smoke and fire, one is still doubtful whether smoke may not be caused by fire, then the Navya-Nyāya reply will be that such a doubt is insincere, for one's actions will give the lie to such a profession of doubt. It is important here to distinguish between having a doubt and merely saying that one has a doubt.

Doubt, being an internal state, cannot be directly observed by anyone except the doubter himself (in introspection). But his own statement that he has a doubt becomes suspect when his actions come into conflict with his avowal. Suppose someone says that he doubts whether smoke is caused by fire, but regularly lights a fire to produce smoke. When there is a conflict between a person's avowal and uniform, unhesitating behavior, according to Navya-Nyāya it is his behavior that has to be accepted, and avowal rejected as evidence of belief. As no one can both believe and doubt the same thing at the same time, Navya-Nyāya philosophers regard such cases of conflicting evidence as cases of insincerity or deliberate lying. Navya-Nyāya does not admit a genuine conflict between sincere, honest avowal and uniform, unhesitating behavior. There cannot be any error in introspection which is the cause of avowal. Introspection, according to Navya-Nyāya, is infallible.

Thus the Navya-Nyāya theory that one cannot generalize, correctly or incorrectly, so long as one has the doubt that the unobserved cases may not be like observed cases, is established. The argument that one can go on doubting and, therefore, will never be able to perform the act of generalizing, is countered by Navya-Nyāya through examining all such cases individually, and by showing that at one state or another the doubt is self-defeating: behavior contradicts it and therefore prevents the doubt from arising.

(d) The Cārvāka Theory

The Cārvāka philosophers have argued that doubt about a general statement cannot be resolved, because we have to pass from observed cases to unobserved cases, and this passage is never logically justified. A man, being a rational animal, has to withhold belief in a proposition which is not rationally justified. Action or behavior is evidence of belief, not in the truth, but only in the possibility (probability?) of the generalization. Udayana, the precursor of Navya-Nyāya, has refuted this position in a famous verse. He points out that to doubt that smoke may not be pervaded by fire is to have already made an inference. For the cases of smoke which have been observed to be attended with fire cannot admit of any doubt. We can have a doubt only about unobserved cases of smoke, cases of smoke which are in different places and times. But if we do not believe that there may be such cases of smoke in different and distance places, we cannot have a doubt about them. That is, no such doubt is possible if we believe that the observed cases are all the cases that there are, that there are no other cases left unobserved. How can we be certain that there are unobserved cases of smoke? The Cārvāka philosophers admit perception as the only source of knowledge, so they cannot talk of unobserved cases of smoke being known. To talk of unobserved cases inference is necessary. If to pass from observed cases of concomitance of smoke and fire to unobserved concomitance is unjustified, then to pass from observed cases of smoke to the existence of unobserved cases of smoke is equally unjustified. The Navya-Nyāya philosophers offer their theory of *sāmānyalakṣaṇa pratyakṣa* to explain how we can talk of unobserved cases of smoke and fire and of their concomitance.

The Navya-Nyāya theory of blocking of one cognition by another if the contents (propositions) cognized are contradictory has been misunderstood by Śrīharṣa, the celebrated author of *Khaṇḍanakhaṇḍakhādya*. He has argued that contradiction is a relation between two, so if one cognition is to be the contradictory of another both cognitions must exist. So, if doubt is to be contradicted by *tarka*, then both doubt and *tarka* must exist together, so that the existence of *tarka* as the contradictory of doubt implies the existence of doubt. So *tarka* cannot resolve doubt.

Now this is a misunderstanding of the Navya-Nyāya theory of blocking, as has been pointed out by Gaṅgeśa. When two

propositions are contradictory to each other, the two propositions must be there, for example, as the cognitions of two different persons. But this does not mean that the two propositions have to be cognized by the same person at the same time. The Navya-Nyāya theory is that if two propositions are contradictory, then the cognition of the one will prevent the cognition of the other. For the blocking of the doubt, it is not necessary that the doubt should exist in the same self; on the contrary, the blocking ensures that the doubt cannot arise at all in a self.

In this connection we have to note another point of the Navya-Nyaya theory. Existence of doubt about deviation is an impediment only to the perception of pervasion (by *sāmānyalakṣana*), but not to an inferential or verbal awareness of pervasion. For even when one has a doubt about the presence of fire in a room, one can still infer its presence by seeing smoke there. So also when one has a doubt about the existence of a snake in a hole, one can still come to believe in it on hearing from a reliable person. The point here is that the presence of doubt about deviation is an impediment or obstruction only to perceptual cognition of pervasion, but neither to inferential cognition of pervasion nor to secondhand knowledge based on authoritative statements of reliable persons.

A final point about the Navya-Nyāya theory of blocking. *Tarka*, being itself a kind of cognition, is known in introspection. But doubt about deviation is blocked by the *tarka* itself, not by its cognition. Moreover, *tarka* by itself does not guarantee that the cognition of pervasion which it helps to produce is, *ipso facto*, true. The truth of the cognition of pervasion is guaranteed not by *tarka*, but by the truth of *tarka*. If the contrary-to-belief conditional is true, and not merely accepted as true by both the opponent and the proponent, then the cognition of pervasion resulting from it is true. This may be regarded as the Navya-Nyāya solution of the logical problem of induction of Western philosophers. The cognition of pervasion is true and absolutely certain because pervasion is cognized by a kind of perception on the removal of doubt by *tarka*.

C. Cognition by Comparison (*upamiti*)

It is a special Nyāya theory that cognition by comparison is an independent source of cognition. According to Vaiśeṣika philosophers, however, cognition by comparison is not an

independent cognition, but is a form of inference. We shall see later on how the Nyāya philosophers criticized the Vaiśeṣika theory.

The stock example of *upamiti* is as follows A city-dweller is told by a forester that a *gavaya* is similar to a cow. Then, when he goes to a forest and perceives an animal similar to a cow, and remembers the meaning of the sentence he had heard from the forester, he has the cognition that any animal of this type is named by the word "*gavaya*". This cognition, according to Nyāya, is *upamiti*.

Here there is a difficulty. In order to perceive similarity of a *gavaya* to a cow, no cow being present, an absent cow, too, has to be perceived. This according to Nyāya is a special kind of perception in which the memory of the cow provides the connection (*sannikarṣa*).

In (Dharmarāja's) *Vedāntaparibhāṣā* the author has said that the knowledge of similarity of a *gavaya* to a cow which is not present is *upamiti*. The Mīmāṃsakas also hold this view (*Śabarabhāṣya* I.1.5). Jayanta Bhaṭṭa in his *Nyāyamañjari* has mentioned a view of the older Nyāya philosophers that the authoritative sentence of a forester is the instrumental cause of *upamiti*. Vācaspati Miśra in his *Sāṃkhyatattvakaumudī* holds that the authoritative sentence that the perception of similarity, together with the memory of the meaning of that authoritative sentence, is the instrumental cause of *upamiti*.

Now we shall explain why later Nyāya philosophers hold that *upamiti* is not really an inference. According to Nyāya philosophers the Vāiśeṣika theory (which makes *upamiti* a variety of inference) is not correct, because there cannot be any inference without belief in pervasion, but in *upamiti* there is no belief in pervasion. It is from the sentence of the forester that we know the meaning of the word "*gavaya*". Moreover, according to Nyāya introspective evidence shows the difference between inference and comparison....

IV. Some Aspects of the Navya-Nyāya Theory of Language

A. Concept of Language

Different concepts of language give rise to different problems and to different theories of language. I shall explain here only a few concepts of language.

(a) Language may be defined as man-made sounds to communicate information or thoughts. The most common form

of sounds is articulate speech. But ths definition of language is wide enough to include drum-beating, or playing of any instrument, musical or non-musical, as in Morse code. Of these different forms of language, articulate speech is the most basic form, for all other forms logically depend on it. The different sounds of instruments have to be conventionally related to information which can be done only through articulate speech. Morse code, again, depends logically on the analysis of speech into letters of the alphabet. Although this conception of language is quite general, it does not include other forms of behavior which may be regarded as language in a still more general sense.

(b) In this very general conception of language, any behavior, not necessarily speech behavior, which can communicate information or thoughts may be called language. In this sense gestures and postures are regarded as forms of basic language. It has been argued that gestures are more basic than speech. A person in a foreign country may use gestures to communicate to others that he is hungry or thirsty or whatever. Gestures have to be distinguished from postures, which even animals can understand. Postures are natural responses common, if not to all animals, at least to higher animals. Postures constitute a very poor language, very little information can be communicated through them. St. Augustine has asserted that gestures and other bodily behavior constitute the natural language of man. That is why a child learning his first language has to observe the behavior including gestures of the elders.

Gestures as paralinguistic behavior may be used with speech to disambiguate. Take, for example, "Bring *saindhava*", where the term "*saindhava*" can mean either salt or a horse. If one is taking food and says this, it is natural to suppose that salt is meant; but one may also intend to proceed on a journey immediately after taking food. So to disambiguate in this case, one may use appropriate gestures together with the word "*saindhava*". If one points to the plate, then salt will be meant; if, on the other hand, one points outside, then a horse will be meant.

It may be argued that gestures constitute a very poor form of language. We cannot express all our thoughts or communicate all information by gestures. But this objection is not valid, because like all languages gesture languages have to be learned. Gesture languages have been developed as sign-languages which have to be learned like any other language.

It has ben argued by Bennett that bees do not have any language even though they communicate through dancing. His argument is that the dancing of the bees is instinctive and does not require to be learned. An essential feature of all languages is that there must be some conventions for the use of languages, and the conventions have got to be learned. If there is any form of bodily behavior which communicates information but which does not have to be learned then it cannot be regarded as language.

(c) The two conceptions of language explained above do not include written language. Sometimes it has been argued that written sentences, especially written atomic sentences, are pictures of reality. But this theory overlooks a fundamental distinction between pictures and written language. A picture is related directly to the object of which it is a picture. Written language, even hieroglyphic, is not directly related to the object but to spoken words. Hence spoken language is logically prior to written language.

Thus Derrida's theory that written language is prior to spoken language is hard to justify. Even though written language expands the scope of spoken language in many directions, still the possibility of written language is dependent upon spoken language.

It is usual to distinguish between a natural language and an artificial language. The distinction, however, is determined by what we mean by "natural language" and "artificial language". We have already noted that according to St. Augustine behavior is "the natural language of man". If we accept this sense then spoken language will be non-natural language which, if interpreted to mean artificial language, can be learnt by a child only through the natural language which he already knows. In this sense a natural language does not require to be learnt. But we have also Bennett's theory that any pattern of behavior, even when it succeeds in communicating information, cannot be called language if it is instinctive. In this sense a natural language will be a language of ordinary people used for all purposes. An artificial language will be a language invented by a group of men for a specific purpose.

It is usual now to distinguish between an object language and a metalanguage. An object language, like formalized arithmetic, is constructed by means of syntax and semantics in the metalanguage. This metalanguage is a natural language supplemented by additional symbols if need be. This

metalanguage may, in its turn, be formalized by means of a meta-metalanguage which has to be a natural language. The point is that to construct an artificial language syntactical and semantical rules have to be stated eventually in a natural language, as the artificial language is yet to be constructed. So in what follows we shall be concerned mainly with natural language.

B. Navya-Nyāya Theory of Language

Language is articulate speech. Sign languages, like showing two fingers to mean two and other gestures to mean that one is hungry, thirsty, etc., are languages only in a derivative sense just as written language is. The Navya-Nyāya theory is that spoken language is language in the primary sense, whereas gestures and written language are languages only in a derived sense, for the gestures and the written signs remind one of the spoken words which would have been used to convey the same sense. It is only by "suggesting" spoken words that these become a "language". The commentators on Viśvanātha make a distinction between the so-called gesture language and written language by describing the former as language of a different kind (*vijātīya*) and the latter as of the same kind as the spoken language, by contrast *sajātīya*. But even though gesture-language and written language are thus different from each other in kind, still both of them differ from spoken language. They are called "language" in the wider sense, because gestures and written characters "suggest" (*bodhaka, saṅketita*) spoken words which alone constitute language proper.

Thus Navya-Nyāya theory is based on the presupposition that written language is parasitic on spoken language, even though writing makes possible long and complicated constructions which would have been impossible without writing. Even admitting the fact that the art of writing not merely gives permanence to speech so that it can be repeatedly observed and also makes possible the development of language in newer directions, the fact remains that written language would have been impossible without spoken language. Thus spoken language is logically prior to written language. In their theory of meaning Navya-Nyayā philosophers, therefore, regard spoken language alone as primarily significant, and written language is taken as derivatively significant insofar as it suggests the spoken words. It is only through spoken words suggested by the written words that they become instruments

of communication.

About gesture language, too, Navya-Nyāya philosophers hold the same theory of the primacy of spoken language. Here this primacy is not apparent; for, apparently, gesture language precedes articulate speech in the process of evolution. Animals use bodily signs to communicate with each other without sounds. Yet it is a fact that articulate speech is different in kind from gestures which can be used to communicate only the barest information. The emergence of articulate speech marks a total break in the process of evolution. Many Western philosophers have even identified the rationality of man with articulate speech which, then, is the *differentium* of man from other coordinate species. (Of course, Navya-Nyāya does not contain any idea of biological evolution.) Moreover, it is not clear whether two deaf and mute persons can communicate by means of gesture language, for neither can be reminded of the spoken words "suggested" by the other's gestures, as none of the two can possibly know any spoken words.

C. Sanskrit as the Object Language

All systems of classical Indian philosophy offer a theory of Sanskrit language and a theory of meaning of words and sentences of Sanskrit. It is necessary to note some special features of this language. One feature of Sanskrit as a language, noted earlier, is that it is a frozen language; only as a fozen language does it serve as the object language in the Navya-Nyāya theory as also in Indian theories of meaning generally. Sanskrit has a very rigorous grammar starting with alphabets classified into vowels and consonants, rules of formation of words from basic elements, rules of formation of sentences, and so on. Pāṇini's grammar, with its rigorous definitions explicitly stated as rules of abbreviation, and rules with an enumeration which uniquely determines their order, with various devices for determining the scope of the rules and the order of their precedence, stands out as one of the best examples of the science of grammar. Still Sanskrit differs from a rigorously constructed artificial language insofar as it allows ambiguous words, figures of speech, and some freedom to analyze a given expression in different ways. A complex expression, therefore, is, in general, not uniquely analyzable even in the most technical language of Navya-Nyāya.

Dealing only with Sanskrit as the language of study gives rise to the problem of explaining the possibility of regional

languages and languages other than Sanskrit. An extreme theory, supported by Gadādhara, is to treat all expressions of regional languages as really devoid of meaning but used in practice as significant only by mistake. Expressions of regional languages create only an illusion of sense given this exclusivist account. This extreme theory has not been accepted by many Navya-Nyāya philosophers. Annambhaṭṭa, for example, in his commentary *Uddyotana* on Kaiyaṭa's *Pradīpa*, gives an argument of some Navya-Nyāya philosophers against the theory supported by Gadādhara. We now explain this argument.

Like words in Sanskrit, words of regional languages too have meanings. For there is no way of determining whether Sanskrit words have primary meaning and regional languages have only derivative meaning or conversely. The determinant here cannot be equiformity of words in all countries, for the meaning of "equiformity" is vague and unclear. It may mean one of three different things:

(i) "equiformity" may mean that Sanskrit words are used in all countries;

(ii) "equiformity" may mean that words which are used in a particular region have a recognizably identical pattern;

(iii) "equiformity" may mean absence of usage of regional languages.

Now sense (i) cannot be accepted because in some foreign lands (*kvacin mlecchadeśe*) there is no trace of Sanskrit (*saṃskṛtagandhābhāvāt*). Sense (ii) cannot be accepted because equiformity in this sense is common to all languages. Sense (iii) also cannot be accepted because it violates what has been stated in the *Mahābhāṣya*, which in many places emphasizes use of different non-standard words among people. Even the way the elite speak cannot be the determinant, for this is common to all languages.

According to these philosophers, who opposed the theory which Gadādhara supports, God created the world of objects and also their names at the same time. It cannot be said that God created only the Sanskrit language and no others. When God created the Ionians, He created their language at the same time. It cannot be said that those languages evolved from Sanskrit.

The attempt of modern comparative philologists to postulate and construct a proto-Aryan language from which all Indo-European languages have evolved according to rules of phonology, philology and grammar, tends to support the theory

that originally God created only one language, be it Sanskrit or some other language from which all other languages have evolved. The consequence of this theory of the origin of language for the theory of meaning, according to Gadādhara, is that the exclusive concern of the theory of meaning should be with the original language as the object language. Now this is a further theory which need not be accepted even if one accepts the theory of evolution of different languages from one mother language. Thus the arguments given above by those who propound the theory which Gadādhara rejects are invalid, because like Gadādhara they assume the debatable theory of the logical connections between the mother language and the theory of meaning. Even if it be admitted that the regional languages in North India have evolved from Sanskrit, it does not follow that words and sentences in them do not need to be explained and that no theory of meaning over and above the theory of meaning of Sanskrit is needed. This is the point which Jagadīśa and other Navya-Nyāya philosophers have made. According to these philosophers, there is a possibility of developing different theories of meaning for different regional languages; only they are not interested in developing such theories. They are concerned only with Sanskrit as the object language.

D. Divine Origin of Language

Indian philosophers of the Nyāya school all agree that Sanskrit is a divine language, created by God. God as the creator of the universe is also the creator of all languages including Sanskrit. This is the point emphasized by the views explained by Annambhaṭṭa. One reason for holding this theory seems to be that language developed naturally and not by convention. This theory of divine origin of languages, especially of Sanskrit which is the object language of all theories of meaning in Indian philosophy, has a far-reaching consequence for such theories. To create a language is to endow expressions of that language, after they have been created, with meanings. God creates both the world of objects and also the language with which to talk about it. But this talking about the world of objects is impossible unless there is a relation of meaning between language and reality. According to Navya-Nyāya this relation between language and reality is God's will. That is, God not merely created the objects and the sounds, but also instituted a relation of meaning between sounds and objects.

Because of this relation sounds become expressions of a language. Spoken words as physical realities are merely a kind of sounds; they become language only when they are endowed with meaning.

The theory that meaning as a relation between an expression and an object, simple or complex, is the will of God, who is also omniscient and truthful, has the consequence that no basic words can be empty, i.e., devoid of meaning (reference). Thus this theory gets rid of the problem of empty terms, as Frege for example does, by constructing an artificial language and arbitrarily assigning the null object as the referent of all so-called empty terms which therefore no longer remain empty but have the same reference. But this device of Frege is artificial and there are Western philosophers who do not accept this way out of the problem posed by the existence of empty terms in a language.

There is, however, a more fundamental problem in any theory of meaning which Navya-Nyāya philosophers try to solve in their own way by their theory that meaning is divine will. Although articulate speech is a natural development of a power in man by which he is distinguished from other animals, still in later stages of development languages are constructed, of course, by using natural languages–i.e., languages which have arisen and have developed naturally.

In artificial languages, if used for communication, the relation of meaning between expressions of such languages and elements in the ontology is purely conventional, i.e., creations of the will by those who construct those languages. Later Navya-Nyāya philosophers take note of the phenomenon of creating technical (*paribhāṣika*) terms and hold that the relation of meaning is conventional in the sense that it is created by the will of the person(s) concerned. From this they generalize to the case of even natural language like Sanskrit, and hold that the meaning relation is the creation of the will of man. But this amalgamation of natural languages into man-made languages raises various difficulties. For example, no artificial language can be created in a vacuum: such construction presupposes the prior existence of another language. The theory that natural languages could develop by human convention faces the difficulty of explaining how such conventions could ever be made in the absence of any language whatsoever. The two problems of origin of a language and constructing a theory of the nature of meaning for that

language, though apparently fundamentally different, are yet essentially connected. For a language cannot originate without its meaning objects; the nature of the origin of language determines the nature of the relation of meaning within that language. If the language is man-made, then meaning is also man-made for that language; if it is not man-made, then meaning is not man-made.

E. Theories of Language-Learning and Theories of Meaning

Just as theories of the origin of language determine some fundamental aspects of theories of meaning, so also theories of language-learning and theories of meaning are closely connected. Recently many philosophers like Davidson have argued against philosophical theories of meaning prescribing rules of language-learning, which must be empirically ascertained and not *a priori* prescribed. Yet it is a fact that different theories of meaning do determine at least some aspects of theories of language-learning. For example, those philosophers who advocate that it is the sentence which is the unit of meaning, and not the words, usually reject lexicons as sources of word-meaning on the ground that in Sanskrit lexicons the meanings of isolated words are given and not as they occur in sentences. The Mīmāṃsakas hold that meanings of words can be learned only from their use in sentences by persons who already know the language (*vṛddhavyavahāra*). The Naiyāyikas, on the other hand, advocate the theory that isolated words are the units of meaning and hence accept grammar, lexicon, the statement of authoritative persons, usage, and linguistic contexts as sources of learning the meanings of words. Thus a difference in the theory of the unit of meaning determines the source of learning meanings. It has become commonplace among contemporary Western philosophers to hold that dictionaries do not give word-meanings but explain word-meanings only in the context of a sentence. This, however, goes against the concept of a Sanskrit lexicon, which gives only synonyms of word. Thus the very concept of a lexicon or dictionary of a language changes according to the theory of meaning formulated in philosophical systems.

F. Language as Means of Communication

According to Navya-Nyāya, language used as a means of communication is understood as what the speaker intends to

convey. Language in this aspect is treated in Indian philosophy in general and Navya-Nyāya in particular as a source of second-hand information. To be a source of knowledge second-hand is, according to Navya-Nyāya philosophers, to be the instrumental cause which produces the cognition of the sentence's meaning. The concept of meaning, therefore, is defined purely from the hearer's point of view, giving a very minor importance to the speaker's point of view. If language as means of communication is conceived as the instrumental cause which produces a certain cognition in the hearer, the concept of meaning is formulated only from the hearer's point of view. According to Navya-Nyāya philosophers, the speaker already has the knowledge which he intends to communicate to the hearer. Thus in the case of inference for oneself, the person completes the process of inference without using any words at all. When he wants to communicate his inference he uses a sentence with five members. It is the hearer who has to understand the meaning of the sentence. Hence meaning is determined by the divine will which produces a certain cognition in the hearer on hearing the relevant word. The meaning of words conceived in this way completely ignores the intention of the speaker, which is important only in understanding a sentence's meaning. Thus in word-meaning the speaker has no role.

Thus Navya-Nyāya philosophers like Jagadīśa have the problem of explaining how words which mean objects can yet mean a relational structure when they occur in a sentence. This is because words do not occur in isolation in a sentence. The cognition of the syntactical relations among the words in a sentence is the only means of cognizing the semantical relations among the objects meant by the words.

G. Ontology of Spoken Sentences

I shall discuss here first the problem whether a spoken sentence can be regarded as a picture of what it means. One initial difficulty is that the structures of synonymous sentences in different languages are very different. So it is not clear which sentence of which language can be a picture of what it means. This difficulty is present in the case of written sentences also. Wittgenstein, for example, says: "In Russian one says 'stone red' instead of 'the stone is red'"[1]. This difficulty may be sought to be solved by formulating a symbolic canonical form for all synonymous sentences with different structures in different languages. But formulas of symbolic language, of symbolic logic for example, are always written expressions. We have already discussed why written sentences cannot be regarded as pictures even by using conventions of projection.

There is, however, a more serious ontological difficulty about spoken words or sentences. One cannot speak a whole sentence or even a word of more than one syllable: one can only utter sounds in succession. When the first syllable or phoneme is uttered the second is not yet uttered. When the second is uttered the first sound has vanished. So it is impossible to speak a whole sentence as one entity. As uttered sounds are necessarily successive, they cannot be regarded as pictures, which are wholes of co-existing parts.

The Navya-Nyāya philosophers explain the experience of the common man who perceives a whole sentence. These philosophers make use of a special form of perception due to *jñānalakṣaṇasannikarṣa* to explain how past sounds can also be said to be perceived. When one hears the sounds as successively uttered, one remembers them in their order. This memory of the earlier sounds functions as a relation (*sannikarṣa*) which together with the hearing of the last syllable or phoneme produces the perception of the whole sentence. If such a special form of *sannikarṣa* is not admitted, can there be any explanation how a whole sentence can be perceived through hearing successive momentary sounds? There are different philosophical theories which I shall explain very briefly.

There are philosophers who distinguish between the act of speaking and a spoken word or sentence. They point out various difficulties in the Navya-Nyāya theory of perception of a whole word or sentence. If the last syllable presented together with the memory-impressions or traces of the earlier syllables can cause perception (hearing) of the whole word or sentence, then, even if the syllables are uttered with long temporal gaps in between, the perception of the last syllable together with the impressions of the earlier ones ought to cause perception of the whole word or sentence. But no one accepts this as a cause of

[1] Ludwig Wittgenstein, *Philosophical Investigations* Translated by G. E M. Anscombe. (New York: The Macmillan Company, 1953), p. 10e.

the perception of the whole expression. The case is not different even if the syllables are uttered in quick succession. Secondly, if the sounds are remembered in the same order in which they are uttered, how could they be simultaneously grasped?

Here Grammarians like Bhartṛhari do not accept the theory that speaking is ontologically identical with what is being spoken. A spoken word or a sentence, according to their theory, is a type of reality different from speaking. But the theory that words are ontologically different from the noises uttered by a speaker involves all sorts of difficulties. One difficulty is how to explain whether a speaker speaking words and sentences performs two acts–producing sounds and speaking words. Then there is also the difficulty from the hearer's point of view: Does a hearer hear two things–sounds and words? The following three different answers, apart from their own difficulties, are inadequate chiefly because they fail to explain what the speaker does in speaking.

(a) One answer is that sounds are heard as identical with words. There are not two objects which are heard when one hears words or sentences. But this answer does not explain how noises and words can be ontologically different and yet the hearer can hear them (correctly) as identical.

(b) The second answer is that sounds are imperceptible and only words can be heard. What is necessary and sufficient to explain the perception of words and sentences is that there be sounds, not that the sounds be perceived. A difficulty with this theory is that a deaf person who cannot hear sounds should be able to perceive spoken words if objectively there are the appropriate sounds.

(c) Words are manifesters of objects, and so different from mere sounds. But when one does not clearly hear the words because they are, say, spoken at a distance: one hears only the sounds. Quine cites many examples of "listening to a lecturer with an odd accent or unusual diction....Accents may bewilder, and they can cause misapprehension without bewilderment."[1] A difficulty with this theory is that it has to postulate two different causal relations–one for perception of words as fused

[1]W. V. O.Quine, *Quiddities: An Intermittently Philosophical Dictionary* (Cambridge, Mass.: Belknap Press, Harvard University Press, 1987), pp. 166-167.

with sounds, and another when they are not so fused.[1] When we hear sounds we cannot hear the words, for perception of sounds prevents perception of words. Yet when we perceive words we also perceive sounds as identical with the words. But then the question is: if noises and words are ontologically different, words can at best be confused with, not fused with, sounds. So the problem of the reality of words confused with the ephemeral sounds producing correct perception of words remains.

H. An Ontological Problem Concerning Meaning

Language is about reality. The problem here is to explain how that is possible. This is a transcendental question as distinct from a factual one. Hence it cannot be solved by asserting that language is, as a matter of fact, about reality. In the usual analysis of meaning, this transcendental problem is presupposed as already solved. For example, Charles Morris says: "The process in which something functions as a sign may be called semiosis. This process has commonly been regarded as involving three (or four) factors: that which acts as a sign, that which the sign refers to, and the effect on some interpreter in virtue of which the thing in question is a sign to that interpreter. These three components in semiosis may be called, respectively, the sign vehicle, the *designatum*, and the interpretant; the interpreter may be included as a fourth factor."[2]

Morris has already assumed that there are signs, that there is an "effect on some interpreter in virtue of which the thing in question is a sign to that interpreter". He explains this effect behavioristically thus: "To use one of Mead's frequent examples, we may consider the situation of a person noticing smoke in a crowded theatre. Smoke is a non-gestural sign of fire, and its perception calls out responses appropriate to fire. But further, the spoken word 'fire', as a response which is connected with a whole set of responses to fire, tends to be uttered. Since this is a linguistic sign, the utterer begins to respond towards this

[1]"Speaking with an eye to speech is one thing, and speaking with an eye to content is another." (Quine, ibid., p. 167)

[2]Charles W. Morris, *Foundations of the Theory of Signs* (Chicago: University of Chicago Press, 1938), Volume I, No. 2, p. 3.

tendency toward utterance as other members of his social group would respond–to run toward an exit."[1]

But this explanation of how a sound becomes a linguistic sign is not satisfactory. In the course of reacting to smoke as a non-gestural sign of fire, one may utter the sound "fire" which is just an interjection. The passage from sounds as interjections to sounds as signs remains unexplained. Moreover, conditioned reflex is really a physiological process corresponding to the psychological process of association. The semantical relation between a word and its meaning is not just association, but a special type of association. The process of replacing a non-gestural sign by a verbal sign in response to an object or situation cannot be identified with semantical meaning, because in this process there is no scope for uniformity. It would be a mystery if everyone, or a person always, uttered the same word "fire" when reacting to the non-gestural sign "smoke" before learning the word which is not a semantically unrelated sound. Thus this behavioristic theory of how a word is semantically related to its meaning already presupposes the theory that it is used by "members of a social group" in very similar situations. But this is exactly what needs to be explained.

That meaning is neither a conditioned reflex or a mere association can be shown by the example of Helen Keller. Helen was deaf and blind from early childhood. The problem was how to teach her language. If meaning were a conditioned reflex or an association, it could have been established by repetition. Her teacher failed to make her realize that the sign that she made on her palm meant the object which she experienced. The teacher almost gave up her attempt to teach Helen language. As a last resort, she thrust Helen's hand under water and made a sign on her palm at the same time. Somehow Helen understood that the sign made on her palm meant water. Once the concept of meaning was available to Helen, there was no difficulty in teaching her language. This case shows that meaning cannot be a conditioned reflex or mere association. Meaning is association of an altogether different kind. For example, the word "light" may be associated with darkness (by contrast), with the sun, or a lamp, or even with other words as in "Hail, holy light!". But all these associations do not constitute the meaning relation

[1]Ibid., p. 37.

between the word "light" and light'.

This also explains why by simply observing the behavior of an adult on the command of a senior person a child cannot learn the meaning of sentences and eventually of words. For this child may get the idea that the behavior and the spoken words are causally, not semantically related. That is why St. Augustine has to say that the semantic relation is "naturally" known by knowing "the natural language" of men. The problem is how to know that what a person does, by moving his hands or by producing sounds, can be regarded as being about reality. A person's behavior is his personal affair, perhaps causally determined by heredity and environment; how can one ever get the idea of a semantical relation between the personal action (including speech behavior) and reality? A sound emitted by a person may be an interjection, not necessarily a significant word. That a sound uttered by anyone can at all be about an object other than the sound is a mystery.

A theory which emphasizes the conventional rather than the causal, behavioristic factor in semantic meaning has also been proposed. But convention, as explicitly stated rules, is possible only when some language (a metalanguage) is available. But "rules for use of sign vehicles are not ordinarily formulated by the users of a language, or are only partially formulated; they exist rather as habits of behavior".[1] The problem is to explain how "habits of behavior" are possible to begin with. Navya-Nyāya philosophers invoke God's will as semantically relating a word with its meaning. This is almost the same theory as a natural connection between words and objects which is also not manmade. But this seems to be very much like repeating the problem rather than solving it.

The metaphysical theory of semantic relation between words and objects emphasizes the point that this relation cannot be explained except on the hypothesis that words as articulated sounds and objects which are altogether different types of reality on the surface must really be at the deepest level of consciousness. Unless language as rooted in consciousness is fused with reality is one amorphous entity, language as articulate speech cannot refer to, designate or mean reality. Even at the surface level of articulate speech, language cannot be totally divorced from reality. Even at the surface level of

[1]Morris, ibid. p. 23.

articulate speech, language cannot be totally divorced from reality. Language as sound and real things are very different types of reality. The word "fire" and fire are indeed very different. Still the word "fire" can mean fire, can be semantically related to it, only if we suppose that language and reality are one at the deepest level of human existence. Thus the possibility of semantic relation can be explained only on the hypothesis of the metaphysical unity of language and reality. This is the theory of the Grammarians.

Nyāya philosophers, however, offer a different solution. They point out that God, who has created both the words and the objects, can relate them semantically by his will. It is divine will which is the semantical relation. This also explains why in a particular language a particular word means a particular object. The Grammarians explain why any word can mean any object, but not why a particular word means a particular object in a particular language. That meaning of words has a conventional aspect is missed by them.

It may be argued that Bhartṛhari has also admitted conventional meanings of words. But this aspect of Bhartṛhari's theory does not seem to be consistent with its other fundamental aspects. According to Bhartṛhari it is the sentence which is real as an indivisible unit; the words are unreal appearances. So both syntax and semantics of words are unreal. As words are unreal, Bhartṛhari cannot also hold that words are semantically related to objects. Words are useful fictions; but they are fictions. Any fictitious entity cannot be related to objects which are empirically real.

I. The Navya-Nyāya Theory of Meaning

The main feature of Indian theories of meaning in general and the Navya-Nyāya theory in particular derives from the basic concept of language as the only means of communication. Language is used, words are spoken, only to communicate information to a hearer or group of hearers. This leads to the construction of theories of meaning exclusively as explanations of how the hearer obtains knowledge from spoken words of a reliable person. The meaning of a word or a sentence is explained in terms of the knowledge which the hearer obtains from the word or the sentence used by the speaker. Thus the theory of meaning is necessarily a part of the theory of knowledge–especially of the sources of knowledge. Although in developing its theory of meaning Navya-Nyāya philosophers

deal exclusively with the hearer's point of view, still they also take into account the intention of the speaker as a determinant of the meaning of the sentences used by him. This is because the hearer, in order to get (second-hand) knowledge from a speaker, has to understand the intention of the speaker in order to understand that speaker's intention as to what the hearer has to do to obtain understanding of what the speaker means. Yet the intention of the speaker cannot create new meanings of expressions; he can only pick out, choose, one of the many meanings already ascribed to them. A speaker speaking a language is completely determined in his choice of words and idioms by their semantic meanings in the language fixed by convention or otherwise.

Jagadīśa, however, does not accept the view that the hearer has to understand the intention of the speaker. His argument is that the intention of the speaker can only be guessed or inferred from verbal or non-verbal contexts, etc. So to understand the speaker's utterance it is enough to note the observable features of the context; there is no point in first inferring the speaker's intention from these various features and then trying to understand what he says *via* this inference of his intentions.

In the case of a parrot uttering a sentence, how can we infer the intention of the parrot, or even note the context? Jagadīśa's answer to this question is that parrots can never speak new sentences which they have not been trained to speak, and hence the sentences which a parrot might utter will carry the intention of the person who trained it. It is by noting the features of the context of the trainer's utterance that we can understand the meaning of such sentences.

J. The Navya-Nyāya Theory of Word-Meaning

(a) The relation between words and objects such that a sentence formed from an appropriate selection of words means a related objective structure is called the "power" (*śakti*) of words (to mean objects).[1] This relation between words and objects at a particular time is founded on previous usage, leading to an infinite regress which is stopped by an eternal convention. This convention expresses the eternal will which is not the source of, but is identical with, the relevant relation

[1]Although the word "*śakti* is used for this relation, Navya-Nyāya does not recognize it as a potency or capacity.

between word and object.

(b) This relation between word and object may be either direct or indirect. Where there is a difficulty in understanding a sentence's meaning construing the words literally, indirect meaning is resorted to.

(c) This relation between word and object is conceived as that relation by knowing which one knows the object on hearing, remembering, inferring, or otherwise cognizing, the word. This emphasizes that the Nyaya theory of meaning is primarily in terms of the hearer's cognition of the appropriate object on cognizing the proper word. The convention expressing the eternal will is usually put in the following form:

(i) Let "O" produce the cognition of O.

As this convention is applicable not to the speaker but to the hearer only, the Navya-Nyāya theory of the relation of words and objects is explained fundamentally in terms of the cognition which the hearer has on hearing the word. Thus the word "O" is related to the object O by the convention (i) only *via* the cognition of O. The convention (i) really connects the cognition of "O" causally with the cognition of O, but semantically with O itself. The semantical relation between "O" and O is defined in terms of the cognition of O produced by hearing "O" only if the hearer knows the convention (i).

(d) A word can refer to an object or objects only if the objects are definite, i.e., possess one or more properties which as a matter of fact belong to all referents but not to anything else. These properties thus completely determine the (class of) referents.

(e) A word can be semantically related to an object only under a definite mode, i.e. only by virtue of the properties stated in (d) above. This is the usual theory to which some exceptions are made by many Navya-Nyāya philosophers. According to these philosophers words may be, sometimes at least, related to objects directly and not through any mode.

(f) The mode under which the object is presented by the word is invariably the qualifier in the cognition of an object produced by hearing the word. This word may be a proper name, a general term, an abstract term and so on. When a general term like "cow" is used, it applies to all and only individual cows which are selected from all objects of the universe by the universal property cow-ness, belonging to all and only cows. Generally, this property of the objects, by virtue of which a word applies to them and only to them, need not be

a universal in the technical sense of Nyāya. But it is necessary that this property, which demarcates all and only these objects to which the word applies, must belong to the objects themselves, must be a property of these objects. Thus the mode under which objects are presented by a word must be a property of the objects themselves. The hearer who knows the convention will cognize the objects under this mode on hearing the word. Thus such a person on hearing the word "cow" will have the cognition of individual cows as instances of the universal property cow-ness, i.e. as cow-ness-possessing. To cognize cows as cow-ness-possessing is to have a cognition of which the cows are the qualificands and cow-ness is the qualifier.

(g) This mode of presentation of the object(s) is also a cause for application of the word to the object(s). This is applicable to the speaker as well as to the hearer. When the speaker uses a particular word, he has the cognition of the object(s) under the specific mode which is a cause for his applying the word to the object(s).

(h) This property is also semantically related to the word. The word "O" is semantically related to three elements in the ontology,

(a) The object(s) O,
(b) The property O-ness.
(c) The relation R between O and O-ness.

Anyone who knows the meaning of "O" will know O as O-ness-possessing by R. But apart from this ontological relation between O and O-ness, O-ness is also the mode or qualifier of the cognition of O produced in the hearer on hearing "O".

This explains why a cognition generated by a word is a construction-filled cognition. The object cognized as the referent of a word is the qualificand of the cognition, the mode of presentation of the object is the qualifier, and the relation between the object and mode of its presentation by the word is cognized as the qualification.

Now Gaṅgeśa argues that cognition of the qualifier is causally necessary for every construction-filled cognition. Thus the cognition of the property of the object as the mode of its presentation must be prior to the cognition of the object in a construction-free perception. The Nyāya argument is that one can cognize the meaning of the word "cow" only as that which is qualified by cow-ness. Anyone who does not have a prior cognition of cow-ness cannot cognize the meaning of the word

"cow". It may be argued that cow-ness can be cognized only in a prior construction-filled cognition.

Gaṅgeśa's opponent challenges this theory. He argues that in order to have a construction-filled cognition generated by a word it is not necessary to have a prior cognition of the property in a construction-filled perception. For a novel qualifier previously not cognized becomes cognized as the limiter of being meant by a word because of semantic fitness, etc.

There is a difference in the interpretation of the Pūrva-Mīmāṃsā theory of the cognition of word meaning. We have given one interpretation above. A second interpretation of the Pūrva-Mīmāṃsā is given by Śaṃkara Miśra in his commentary *Upaskāra* on the *Vaiśeṣikasūtras* of Kaṇāda. This interpretation is that the Pūrva-Mīmāṃsā theory of the cognition of the meaning of a word like "cow" is that cow-ness is cognized as the meaning of the word by the semantic power being cognized, whereas (any) cow is cognized as a particular object by the actual presence of the semantic power of the word, even when not cognized as such. Gadādhara has said that Gaṅgeśa accepts this interpretation of Pūrva-Mīmāṃsā's theory of the cognition of word-meaning.

K. The Import of Sentences

That a sentence means a relational whole is admitted by all. But in Indian philosophy these relational wholes are always regarded as complex objects rather than what are called "facts" in Western philosophy. Thus, what a sentence means has the form a-R-b, which means a as related to b by R, and not the fact that a is related to b by R. In this complex object, the first term of the relation is the qualificand and the second term is the qualifier. The entire complex is the qualificand as qualified by the qualifier.

The problem which arises here is how to determine which of the elements of the complex object becomes the qualificand and which the qualifier in the cognition of sentential meaning. There are three different theories on this point in Indian philosophy: (i) the view of the Grammarians, (ii) the view of the Mīmāṃsakas, and (iii) the view of the Naiyāyikas We shall explain these theories in some detail.

(i) According to the Grammarians, in a sentence the verb is the most important element and hence in the cognition of sentential meaning it is the meaning of the verb which becomes the qualificand and the meaning of the other words becomes the qualifier. Thus the sentence "Devadatta cooks" produces the cognition of its meaning which takes this form: the activity leading to the cooking which is going on at the present moment, and of which the one and only agent is identical with Devadatta. The meaning of the verb is an activity leading to the realization of the result or the production of that effect.

(ii) According to the Mīmāṃsakas, the meaning of the sentence is almost the same as that of the Grammarians, the only difference being that the action leading to the production of the effect is regarded as the meaning of the verb, i.e. the verbal root, by the Grammarians, whereas according to the Mīmāṃsakas this action leading to the production of the effect is not meant by the verbal root but by the verbal suffix. Moreover, this action is not a physical action, but merely a mental effort (*bhāvanā*). In the above sentence, according to Mīmāṃsā philosophers, the mental effort is meant by the inflection "s" in "cooks", but not the root "cook", which means "the changed state (of the food)".

(iii) According to Nyāya, it is the suffix which means the mental action and in this Nyāya agrees with Mīmāṃsā and differs from the Grammarians. Nyāya differs from both in holding that a sentence produces a judgment the subject of which is meant by a word in the first declension. Thus the sentence "Devedatta cooks" produces the judgment: "Devadatta (is the) locus of the action (i.e. the mental effort; a physical action cannot belong to an act) leading to a changed state (of the food)". Devadatta is the subject of the judgment because he is referred to as "Devadatta" which is in the first declension.

Whichever theory one accepts, one and the same entity cannot be meant both by the verbal root and also by the verbal suffix. If mental effort is the meaning of the verbal suffix, then it cannot be the meaning of the verbal root also according to the same theory.

L. Cognition of Sentence-Meaning

For knowing the meaning of a sentence the following seven factors are necessary:

(i) Cognition (hearing, remembering, inferring, etc.) of words.

(ii) Cognition of the relation between the words and their meanings.

(iii) Memory-cognition of the meanings of the

words.

(iv) Cognition of the intention of the speaker.
(v) Cognition of semantical fitness.
(vi) Cognition of expectancy among the words.
(vii) Cognition of the contiguity of the words.

(i) In many systems of Indian philosophy, especially in Navya-Nyāya, cognitions are classified according to their instrumental causes. Understanding the meaning of a sentence is a kind of mediate cognition which is often defined as a cognition resulting from a previous cognition. A distinction is made between words as heard and the hearing of words. If there are no words used then there cannot be any heard words. This is the case in gesture-language where no words are used and still a sentence-meaning is conveyed. We have already explained the Navya-Nyāya theory of seeing the gestures. One is reminded of the word which would have been used if the person could utter them. Hence there are no cognized words, but there is inference of words which therefore is the instrumental cause of understanding the meaning of the gestures.

(ii) Not every cognition one may have on hearing or otherwise cognizing words can be regarded as the understanding of the meaning of a sentence. A sentence may remind one of various things, say, by association. But this cognition due to the laws of association cannot be regarded as understanding the meaning of the sentence. The objects which are presented to the hearer by the semantical relation of the words to their meanings will constitute the sentence-meaning. It is therefore necessary to understand the semantical relation between words and objects in order to understand the meaning of the sentence.

(iii) This cognition of the semantical relation between words and objects produces the cognition of the objects on hearing the words. Cognition of the meaning of a sentence is directly caused by the cognition of word-meanings. This is the composition principle of cognition of sentence-meaning. If one does not know the meaning of a word occurring in a sentence one cannot understand the meaning of the sentence as a whole.

(iv) Cognition of word-meaning, which is the direct cause (*vyāpāra)* of the cognition of sentence-meaning, does not normally require any understanding of the intention of the speaker. The literal meanings of isolated words are usually independent of the speaker's intention. But the cognition of

sentence-meaning always requires cognition of the speaker's intention. (a) In the case of a sentence containing ambiguous words the intention of the speaker is obviously a determining factor. (b) In a sentence where a literal meaning of the word cannot produce the cognition of a sentence's meaning the words have to be interpreted as figuratively used depending on the intention of the speaker. (c) We have already noted that according to Navya-Nyāya philosophers a sentence means a relational complex which is cognized in a construction-filled cognition. Such a cognition has a qualificand, a qualifier, and a qualification relation between them. It is the intention of the speaker which determines which word-meaning would be the qualificand and which the qualifer. (d) The intention of the speaker, namely that the effort to perform this action is good, is the first meaning of the *liṅ* suffix.

(v) As a sentence means a relational complex, words occurring in the sentence must mean objects which can be related by the relations meant in the sentence. This is a relation of fitness among word-meanings and is therefore semantical in nature. Without the fitness the objects will not be able to hang together to a form a relational structure.

(vi) Expectancy is a syntactical relation based on semantical fitness. Words occurring in a sentence must have an order or concatenation such that the sentence as a whole can mean a relational complex. Thus in the sentence "*ghaṭam ānaya*" we have the following four words: (a) *ghaṭa*, (b) *am*, (c) *ā + ni*, (d) *hi*. Expectancy, according to Navya-Nyāya philosophers, is the concatenation of the four words in that order. This is conceived as "*hi*" preceded by "*ā + ni*" preceded by "*am* preceded by "*ghaṭa*". Thus the "word-order" is just the last word as qualified by the preceding word qualified by the preceding word and so on. But the words "*ghaṭa*" followed by "*karmatva*", etc. do not produce any cognition of sentence-meaning, because these words in that order do not produce any cognition of a relational structure.

This conception of expectancy as a syntactical relation is based on the Navya-Nyāya theory that the cognition of a relation among objects meant by words is determined only by the order of the words, for a relation cannot be meant by just any word at all. This is because of the Navya-Nyāya theory that whatever is meant by a word must be cognized under a mode of presentation. A relation is cognized under no modes at all; hence relations cannot be meant by words. If a word is used to

denote a relation, then the relation is at once promoted to a term and ceases to function as a relation in the cognized complex. In such a case a different relation is cognized from the order of the words. Thus expectancy is not just any and every order among words, but only that order among words which produces a cognition of a relational structure as the meaning of a sentence.

According to Navya-Nyāya philosophers a cognition of a relation between objects denoted by verbs and objects meant by words functioning as nominative or other cases is not due to a cognition of expectancy. According to these philosophers this relation between the meaning of a verb and of a nominative in a sentence is produced by contiguity. It is only in the case of objects meant by a nominative or a verbal root and objects meant by their suffixes that the cognition of expectancy produces the cognition of a relational structure. It is to be noted here that according to Navya-Nyāya philosophers suffixes are conceived as words.

(vii) Words occurring in a sentence must have a proper relation of contiguity, without which the intended meaning of the speaker cannot be cognized. In non-inflectional languages an ambiguity may result from this lack of contiguity, as also in an inflectional language. In "the Gauls Rome shall conquer" it is not clear whether the intention is to say that the Gauls shall conquer Rome or conversely. So also in the sentence "*gām aśvam ānaya badhāna*", it is not clear whether both the cow and the horse have to be brought as well as tied. To solve the ambiguity knowledge of non-verbal context or situation is necessary. Otherwise the intention of the speaker cannot be cognized.

Although according to the older Naiyāyikas all the four cognitions (iv)-(vii) are necessary for understanding the meaning of the sentence, according to the later Naiyāyikas cognition of fitness is not a cause of the cognition of sentence-meaning. According to these philosophers belief in the absence of fitness is a negative condition of cognition of sentence-meaning. This means that anyone who believes that the objects denoted by words in a sentence do not fit cannot know the meaning of the sentence. According to Nyāya the absence of a negative condition is a positive condition. So one who does not have the belief in lack of fitness will know the meaning of the sentence. But having a belief in the lack of fitness is not the same as having a belief in the fitness. Thus even where a

cognition of fitness is delayed the cognition of the sentence-meaning may not be delayed.

Jagadīśa holds an extreme position here. According to him expectancy is just the order among words which produces a cognition of interrelation among word-meanings. This expectancy is defined in terms of construction-filled cognition, not in terms of semantical fitness. Thus the words "*vahnināsiñcati*" ("makes wet with fire") do not have semantical fitness, for making things wet and using fire do not hang together. Yet, according to Jagadīśa, this is a good example of a sentence, for it produces a construction-filled cognition, although necessarily false. Jagadīśa also discounts contiguity among words for forming a sentence. The words "*girir bhuktan agnimān devadattena*" do not have the right sequence and are usually regarded as ill-formed. But Jagadīśa regards such strings as sentences. Thus according to Jagadīśa a sequence of words which produces a construction-filled cognition, true or false, or the interrelation among word-meanings is a sentence, i.e., words having only expectancy constitute a sentence.

M. Jagadīśa's Theory of Words Occurring in a Sentence

According to Jagadīśa, only words which in isolation have meaning can occur in a sentence to produce sentence-meaning. The point here is that words in isolation cannot produce the cognition of interrelations among word-meanings. A sentence may or may not be embedded in a larger sentence, but words have to be supplemented by other words in order to produce cognitions of relations among word meanings. This theory is radically opposed to the theory that a word meaning already contains a relation although in the sense of a relation in general, not any specific relation.

A sentence produces a cognition of interrelations of meanings of words occurring in it. This cognition is necessarily a construction-filled cognition. If R is a relation between a and b, then to cognize R is to cognize a as the qualificand and b as the qualifier by the relation R. Thus the meaning of a sentence according to Nyāya is the same as the meaning of a complex term. Jagadīśa's classification of words in a sentence into three categories is in terms of the qualificand, qualifier and qualification relation in the construction-filled cognition produced by the sentence. We have already noted that according to Nyāya the suffixes and indeclinables are words as much as stems and roots. Jagadīśa, therefore, has three

syntactic categories based on their function in construction-filled cognitions (hearing) produced by words occurring in a sentence (i) Stems and roots are words which produce construction-filled cognitions in which they are never the qualificand, i.e. they will always be ultimate qualifiers. (ii) Suffixes are those words which, occurring in a sentence as attached to, i.e. immediately succeeding, the stems or roots, produce construction-filled cognitions in which they are qualificands always qualified by qualifiers which are their stems or roots. (iii) Indeclinables are words occurring in a sentence which produce a construction-filled cognition in which meanings of such words cannot be related by identity with the meanings of other words in the sentence.

N. Gadādhara's Theory of Word-Meanings

In Indian philosophy in general and in Navya-Nyāya in particular, theories of the meanings of sentences are regarded as a part of theories of the origin of true cognition. Hence in discussing theories of meaning, Indian philosophical systems almost exclusively consider how a hearer acquires information second-hand from what a speaker tells him. Indian theories of meaning refer to the speaker's intention only insofar as it is necessary for the hearer to cognize truly what the speaker says.

According to Navya-Nyāya, a word means an object only under a mode of presentation. Anyone who knows the meaning of the word knows the object under this mode, on hearing, remembering, or otherwise cognizing the word. The problem of the meaning of a word is the problem of explaining how the hearer knows the object under the particular mode.

The mode of presentation of an object, according to Navya-Nyāya, must be a property of the object. A property is anything which may be said to be *in* the object. According to Navya-Nyāya this is the case if and only if what is to be regarded as a property of an object is related to the object by an occurrence-exacting relation. Anything related to an object by such a relation will be its property.

The cognition produced by a word in a hearer is of an object which is a complex of three elements a-R-b, where R is an occurrence-exacting relation. It is interesting to note that Mill in his theory of what he calls "concrete general names" says: "The word man, for example, denotes Peter, Jane, John and an indefinite number of other individuals, of whom, taken as a class, it is the name. But it is applied to them, because they

possess, to signify that they possess, certain attributes."[1] Only Gadādhara extends this theory of meaning to all words. The mode of presentation which is a property of the object is always the second term of the relation R.

A. The structure of the cognition caused by hearing the word 'O' may represented schematically as cognition of O-R-(O-ness) where

(i) O is the qualificand of the cognition caused by 'O',
(ii) O-ness is the qualifier,
(iii) R is the qualification of the cognition.

B. The structure of the meaning relation may be explained as follows:

The word 'O' is related to the three elements in the objective complex [O-R-O-ness] by different relations which together constitute the meaning-relation which is one relation.

O-ness has the following three features:

(i) O-ness is a property of O;
(ii) O-ness is the qualifier of the cognition produced by 'O';
(iii) O-ness is meant by 'O'.

Analysis of the meaning-relation. The meaning relation obtains between a word on the one hand and an objective complex on the other, in the sense that hearing a word one has the cognition of the object. Thus the semantic relation between word and object is explained in terms of the relation between the cognition and the object. A word is semantically related to an object if and only if the cognition generated by the word is of that object.

C. The structure of the cognition of the meaning, relation (M), may be represented as follows:

Cognition of: 'O' M O.

In this cognition of M

(i) O is the referent;
(ii) O-ness is the limiter of the property being the referent resident in O;
(iii) 'O' is the locus of M, i.e., has the semantical power to refer to O. Thus, although in the knowledge of M, only O is the referent of 'O', still O-ness and R are known as the limiting property and limiting relation of the property *being the referent* resident in the object O.

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[1] Mill, op. cit., p. 19.

It is important to distinguish between the two cognitions and their structure in A and C above.

D. The word and the object or the objective complex are not related by any real of natural relation, but by will or convention. The general theory is that this convention is eternal or divine will.

The structure of this divine will is as follows:

(DW) Let O be the object of the cognition caused by 'O' where

(i) O is the qualificand of DW;

(ii) O-ness is the limiter of the property of being-the-qualificand-of-the-Divine-Will resident in O;

(iii) Being the object of the cognition caused by 'O' is the qualifier of DW.

Thus to be the referent of 'O' is to be the qualificand of DW. To be the mode of representation of O, the referent of 'O', is to be the limiter of the *being the referent*. Thus O-ness is the mode of presentation of O. O-ness--as the limiter of being-the-qualificand of DW resident of DW resident in O which is the referent–is called 'the limiter of the property of being the referent (or referent-ness).'

(iv) The mode of presentation of the referent being always a property of the referent must be related to the referent by R, an occurrence-exacting relation. Thus R which is a part of the meaning of 'O' must be related to DW. This relation is due to the fact that R is the limiting relation of the property of *being the qualificand* of DW resident in O.

Raghunātha, however, does not accept this usual Navya-Nyāya theory. According to him O-ness is (a) the limiting property of being the qualificand of DW resident in O, and also (b) it is the limiting property of being the qualificand of the cognition caused by 'O' resident in O. But this does not mean that O-ness has to be meant by 'O'. The point that Raghunātha is making here is that only the referent is the meaning of the word, and that neither the mode of presentation of the referent nor its relation (R) to the referent need be included in the meaning of the word. The fact that O-ness is the qualifier in the cognitive structure A, and is also the limiter of the property of being the qualificand of DW, does not mean that O-ness has to be a part of the meaning of 'O'.

E. The mode of presentation of the referent which must be a property of the referent is also the cause for the application of the word to the referent. According to Navya-Nyāya, if a word refers to any object, there must be a cause for the application of the word to the referent.

O. Gadādhara's Theory of *Anaphora*

1. The problem.

S_1 - There is a jar over there, bring it.

S_2 - There is a table over there, bring it.

In S_1 and also in S_2 the pronoun "it" occurs. Grammatically, i.e. syntactically, in S_1 "it" refers to the referent of the noun "jar", in S_2 to the referent of the noun "table". The problem which Gadādhara raises here is semantical. What will be the meaning of "it" in S_1 and S_2?

It appears that "it" does not have a single meaning; it has many meanings. In S_1 "it" means the jar cognized under the mode of jar-ness. In S_2 "it" means the table cognized under the mode of table-ness. As a pronoun like "it" can occur in various contexts, it has many meanings.

A word has many meanings if and only if it refers to different objects under different modes, i.e., when the word has different properties limiting the referent-ness of the word. The rule is that if the limiting properties of referent-ness of a word be many, then the word has many referent-nesses and so becomes equivocal. If, on the other hand, the referents of a word like "jar" are many, yet all referents are cognized under one mode, i.e., if the limiting property of referent-ness of the word is one, then the word has only one meaning.

2. An attempt may be made to show that a pronoun like "it" has only one meaning, despite the fact that it means a jar in S_1 and a table in S_2. For we may say that "it" means the object which is the object of cognition of the speaker. This is the meaning of "it" usually given in dictionaries. For example, in the Oxford English Dictionary we get "The little one is used anaphorically if it means the little flower or what it is that has just been mentioned." In Webster's Encyclopedic Unabridged Dictionary we get "It, pron. 1. (used to represent an inanimate thing understood, primarily mentioned or about to be mentioned)." So "it" refers to the object "understood" or "that has just been mentioned." In Navya-Nyāya terminology "it" refers to an object under the mode *being an object of cognition of the knower* which becomes the limiter of the referent-ness of "it". So "it" has one meaning, becomes univocal.

3. Gadādhara finds this interpretation faulty, because when the speaker says S_1, the cognition which the hearer has is

that he is to bring the jar cognized under the mode of jar-ness and not under the mode of being the object of cognition of the speaker. So being the object of the cognition of the speaker cannot be the limiter of the referent-ness of "it". It will be jar-ness in S_1 and table-ness in S_2. So "it" is equivocal.

4. In reply to this objection of Gadādhara the opponents modify their theory. They now distinguish between limiters of different orders. The first-order limiters of being the referent of "it" are indeed many, jar-ness in S_1 and table-ness in S_2 and so on. But if we rise to a second-order limiter of being the first-order limiter of being the referent of "it", then we have only one property, namely, *being the object of cognition of the speaker*.

Gadādhara criticizes this theory too. He points out that *being the object of cognition of the speaker*, which is the second-order limiter, is a qualifier of first-order limiters. Universals like jar-ness when unqualified and not referred to by any word are cognized in and through themselves, but if the universals are qualified then they are always cognized through their qualifiers. Now in S_1 the hearer cognizes that he is to bring the jar cognized through the mode of jar-ness; but if we accept the theory just proposed, then we ought to cognize the jar in S_1 through the universal jar-ness which again is qualified by being the object of cognition of the speaker. But a hearer of S_1 cognizes the jar under jar-ness not further qualified by any qualifier. Hence this modified theory cannot explain how "it" is univocal.

The opponents whom Gadādhara mentions here come up with an attempted solution to his objection, by distinguishing between a qualifier (*viśeṣaṇa*) and a pseudo-qualifier (*upalakṣaṇa*). A qualifier has been distinguished from a pseudo-qualifier on various grounds of which only some will be explained.

(i) A qualifier distinguishes the qualificand to which it belongs from all other objects. For example, in '(a) blue lotus" the blue (color) is a qualifier of the lotus for the color distinguishes it from lotuses which are not blue. But in "a lotus which is an object of true cognition" the grammatically objectival clause "which is an object of true cognition" means not a qualifier but only a pseudo-qualifier. For, according to Nyāya, every object is an object of true cognition (at least by God, who is omniscient); hence being an object of true cognition is a global property which cannot distinguish any qualificand from others.

(ii) If I want to identify Devadatta's house, I may proceed in two ways: (a) I may identify the house by its location, shape and size, etc., all of which are qualifiers of the house; (b) I may identify the house as the house above which many crows are flying. Now in this case, the crows flying above is a pseudo-qualifier of the house, for they do not belong to the house which is, of course, distinguished from other houses. This case is different from (i) in that the pseudo-qualifier here is not a global property and does distinguish the house from other houses.

(iii) A qualifier distinguishes the qualificand from other objects by being present in it. For example, in '(a) person with a red stick in his hand', holding a red stick is a qualifier which distinguishes this person from other persons. But if I know someone to be a mendicant by his matted hair which he has now shaved, then I am distinguishing him from others by a characteristic which is not present. So this is a pseudo-qualifier.

(iv) The most important point of distinction between a qualified and a pseudo-qualifier which is relevant here is that a pseudo-qualifier is not manifest in the verbal cognition of the qualificand. So in the cognition of a word-meaning a pseudo-qualifier is not cognized as it is not a part of the meaning of the word. Now this distinction is used by the opponents to explain how anaphoric expressions are univocal. Thus the higher-order limiter, being the object of the cognition of the speaker, is a pseudo-qualifier of jar-ness and table-ness; hence this is not cognized in the meaning of "it" in S_1; so also the table under the mode of table-ness in S_2.

Gadādhara, however, criticizes this theory as giving no reason why the second-order limiter should be a pseudo-qualifier. If this is recommended without any justification then even the first-order limiters may be regarded as pseudo-qualifiers. Then "it" in S_1 will refer to the jar without any mode at all; when anyone hears it, he will have a cognition of the jar without any qualifier. But this is not possible; for according to Nyāya no substance can be cognized except through a mode.

Thus the attempts of the opponent to explain how anaphoric expressions can be univocal are not successful. But we cannot also hold that they have many meanings. The theory that "it" is not univocal leads to insuperable difficulties. It will not be possible for anyone to learn all the meanings of a term like "it". For, in S_1 "it" means the jar, in S_2 "it" means the table, and there will be innumerable sentences in which "it" will occur

and in which "it" will mean innumerable objects different from one another. The point is that even though the speaker always cognizes the object referred to by "it" under a proper mode, the hearer cannot always cognize it, for the hearer may not know that meaning of "it". So to explain how anyone can learn the meanings of anaphorical expressions those expressions have to be regarded as univocal. The problem is how to justify this semantically.

Gadādhara's solution lies in explaining why the second-order limiter is a pseudo-qualifier. "It" means, first, the limiter of being the object of the cognition of the speaker. For example, in S_1 the object of cognition of the speaker is the jar. The limiter of being the object of cognition is jar-ness. So jar-ness has the property *having limiter-ness of being the object of cognition of the speaker*. But this property is a pseudo-qualifier of jar-ness, and the jar limited by jar-ness is the referent of "it".

We have to remember here that a limiter of being the referent has three characteristics: O-ness is the limiter of being the referent of O if an only if

(i) O-ness is a property of O;

(ii) O-ness is the qualifier of the cognition generated by "O"

(iii) O-ness is meant by "O".

Now the second-order limiter is not meant by "O" and hence it cannot be the qualifier of the cognition generated by "O". For the divine will is not of the form

DW1: Let "it" produce the cognition of being-the-limiter (limiter-ness) of being the object of cognition

In the absence of DW in this form, being the limiter of being the object of cognition of the speaker cannot be a qualifier of the cognition generated by "it"; hence it cannot be a pseudo-qualifier of the limiter of being that object of cognition.

The divine will which is the semantic relation between "it" and its meaning is of the following form:

DW2: Let "it" produce the cognition of what is limited by what is indicated by a pseudo-qualifier which is the limiter-ness of being the object of cognition.

(Note: A pseudo-qualifier indicates that of which it is the pseudo-qualifier. Thus indication is the relation between a pseudo-qualifier and that of which it is the pseudo-qualifier.)

"It" in S_1 refers to the jar which is the object of cognition of the speaker. Jar-ness is the limiter of being the object of

cognition of the speaker. So jar-ness has the property of being the limiter of being the object of cognition of the speaker. What this property–being the limiter of being the object of cognition–indicates is jar-ness. So this property is a pseudo-qualifier.

Now set us examine how this theory of Gadādhara can make anaphoric expressions univocal. It will be necessary to supplement the explanation of univocation and equivocation. The full explanation is:

A word is univocal if and only if (i) there is one limiting property of referent-ness, or (ii) there is a higher-order property which becomes only indirectly a limiter of referent-ness; (iii) there is one pseudo-qualifier indicating all the limiters of referent-ness of a word. Otherwise, the word is equivocal.

The word "animal" refers to whatever possesses fur, a tail, etc. But the fur and the tail differ in different animals. The higher-order property fur-ness or tail-ness is a universal, and hence is one. This fur-ness, e.g., becomes the limiter of referent-ness of "animal" only *via* the particular furs of the animals. So fur-ness becomes the limiter of the referent-ness of "animal" only indirectly. But as this limiting property, though indirect, is one, "animal" has one meaning. On the other hand, as there is no one higher-order property, either as a qualifier or as a pseudo-qualifier, which can unite the two referent-nesses of a word such as "Hari", "Hari" is ambiguous.

PART TWO

SUMMARIES OF WORKS
(Arranged Chronologically)

1. MĀDHAVA SARASVATĪ (1515)

At the end of the *Saptapadārthī-Mitābhāṣiṇī* this author refers to himself as a recluse with a single staff (*ekadaṇḍin*) and an inhabitant of the banks of the river Krishna. The author must have lived before 1523 A.D., since a manuscript of his *Saptapadārthī-Mitābhāṣiṇī* was copied on that date. He appears to have been a native of Saurashtra. Thakur (ODVS p. 432) describes him as "a native of Sodasi, in the valley of the Sahya mountains wherein is situated the temple of Gokarnamahavali.

1.1. MĀDHAVA SARASVATĪ, *Mitābhāṣiṇī* on Śivāditya's *Saptapadārthī*

"E" refers to the edition by Amarendra Mohan Bhattacharya, Calcutta Sanskrit Series, 1934. There is no translation. The initial numbers represent the sections as numbered in the summary of *Saptapadārthī* found on pp. 645-647 of Volume 2 of EnInPh.

Summary by V. Varadachari

1 (E5) The word "Śambhu" is construed as having various kinds (*yaugika, yoga, rūḍha*) of secondary meaning.

(E6-7) Only-negative (*kevalavyatirekin*) inference is proved to be valid.

(E9-11) While interpreting the benedictory stanza, the author takes up the words "*jagatām hetava*" and argues that this is evidence to prove the existence of God. He adopts the negative mode of inference (*vyatirekānumāna)* for the purpose.

4 (E22) Among the spatial directions, "*raudrī*" is interpreted as atmosphere or the sky.

(E33) Construction-free (*nirvikalpaka*) perception is shown to be always valid. It is brought about by the first contact between the visual organ and an object. The bare nature of the object which is presented there is never sublated. Every awareness is without error (*abhrānta*) with respect to its subject (*dharmin*): error can only arise with reference to its mode of presentation, and construction-free awareness doesn't involve any mode of presentation.[1]

[1] The word "qualifier" (*viśeṣaṇa*) is not used here. This is to show that the qualifier, which is present in the object, will not change. Error arises only in the awareness, not in its content. The qualifier, if it is presented in the

Recognition is valid when it is not sublated; otherwise it is invalid.

9 (E42-44) Liberation (*mokṣa*) is defined negatively as the prior absence of frustration in the form of bodies, etc. not being produced in the future.[1]

(E44) The traditional way of defining liberation is offered as an alternative definition: liberation is the posterior absence of frustration beginning with the last body taken up by the self, etc. By the "last body" is meant that body by remaining within which the self acquires knowledge of reality.[2]

10 (E50) While commenting on Śivāditya's definition of a universal property ("A universal is that which is one, eternal, and inheres in many"), Mādhava refers to a view according to which the word "one" (*eka*) in the definition is used to avoid over-extension to cases where many eternal qualifiers inhere in many loci. Others say that since the word "one" excludes many, there is no need to bring in eternal qualifiers, etc. Mādhava offers an alternative explanation. The word "one" should be taken as introducing one definition of "universal"; there is room for other definitions as well. One such is "a universal is that which has no universal and which is a positive category other than individuator or inherence".[3]

(E51) A counterpositive is defined as that whose nature

awareness without any change, becomes responsible for the rise of valid perception when the chief qualifier (*prakāra*) agrees fully with the object. Otherwise it is a false perception, since the mode of presentation and the actual qualifier do not agree with each other. Hence the author declares that error arises only with reference to the mode of presentation.

[1]This shows that the possibility of the self taking up a body again is ruled out, so that prior absence of frustration will never come to an end. As it is, that prior absence should come to an end with respect to its counterpositive. Frustration should therefore recur. However, to deserve the name "liberation" it cannot recur. "Frustration" as the counterpositive and "prior absence" as the mark produces a contradiction. The qualification "in the form of the non-production of the body, etc. in the future" resolves the contradiction.

[2]It is this knowledge of reality that determines that body is the final one, with the result that the self does not take up any body thereafter.

lacks its own absence".[1]

18 (E76) While dealing with *upādhi*, Mādhava Sarasvatī cites a passage which says that an *upādhi* becomes a defect through leading to deviance (*vyabhicāra*) and is the basis for all defects.

20 (E81) "*Tarka* is the reduction of an undesired pervader" says the text. This reduction is explained by our commentator as carried out by imagining the absence of the *hetu* leading to the conclusion that there is absence of the *sādhya*. Mādhava Sarasvatī remarks that this method depends on the two absences being shown through experience to be concomitant, but that the method is not confined to absences. For example, a reduction involving positive things is this: If the water that was drunk had burned another person's insides the rest of it would have burnt my insides too, but it didn't.

22 (E83) The text of the *Saptapadārthī* defines elasticity (*sthitisthāpaka*) as a kind of trace or dispositional tendency which leads to stability (*sthiti*). Some read this "stability" to mean straightness (*ṛjutva*), but in that case the definition would not apply in the case of something originally curved which regains that curved state when released from stress. Thus the suggested reading should not be accepted.

23 (E88) Some scholars say that mutual absence is eternal.

1.2. MĀDHAVA SARASVATĪ, *Mandānukampanī* on Udayana's *Nyāyakusumāñjali*

R. Thangaswami Sarma attributes such a commentary to Mādhava Sarasvatī. Cf. DM, p. 245.

1.3. MĀDHAVA SARASVATĪ, *Mayūkhamālā* on Gaṅgeśa's *Tattvacintāmaṇi*

Thangaswami Sarma attributes this work to our author. See DM, p. 46.

1.4. MĀDHAVA SARASVATĪ, *Sarvadarśanakaumudī*

The following summary of the section on Vaiśeṣika is

[1]This shows the influence of Udayana's discussion in *Nyāyakusumāñjali* 3 2.

quoted from ODVS pp. 432-433. Thakur does not give page references.

Summary by Anantalal Thakur

The *Kaumudī* starts with *maṅgalavāda*. Then a total of eight different systems of Indian philosophy have been discussed. They are the Vaiśeṣika, Nyāya, Mīmāṃsā, Sāṃkhya, Yoga, Cārvaka, Vedānta and Jaina. However, the Jaina philosophy is not treated separately but is found to be dealt with in the Vaiśeṣika section.

Different topics of the Vaiśeṣika system in the work are as follows:

1. The division of categories into seven. *Abhāva* (absence) is admitted as the seventh category. Four types of absences.

2. The definition of substance.

3. *Śakti* (power), *saṃkhyā* (number) and *sādṛśya* (similarity) are not separate categories.

4. Nine substances.

5. Doubt about air to be nothing but earth. Refutation.

6. Gold, included in the substance fire.

7. Darkness to be the tenth substance is rejected.

8. Similarities and dissimilarities between the seven categories are described.

9. Nine substances have been explained. The work puts forward the constitution of a *dvyaṇuka* (dyad), *tryaṇuka*, *caturaṇuka*, *pañcāṇuka* and so on. Two atoms constitute a *dvyaṇuka*, three *dvyaṇukas* constitute a *tryaṇuka*, four *tryaṇukas* constitute a *caturaṇuka* and five *caturaṇukas* constitute a *pañcāṇuka*.

10. Twenty-four qualities have been enumerated and each of them defined.

11. Awareness is divided into two broad sections: knowledge (*vidyā*) and false awareness (*avidyā*). Knowledge is further divided into four types: *pratyakṣa, laiṅgika, smṛti* and *ārṣa*. False awareness is of four types: *saṃśaya, viparyaya, svapna* and *anadhyavasāya*. All divisions are just as in *Praśastapādabhāṣya* but their definitions in *(Sarvadarśana)Kaumudī* are different from those in the *Bhāṣya*.

We find in the statement of Praśāstapāda that Kaṇāda admitted three types of pseudo-probans e.g., *viruddha, asiddha* and *sandigdha*. Praśāstapāda admits four types of the same by adding one, *anadhyavasita*. But [this] *Kaumudī* is found to have recorded the Vaiśesīkas who, unlike the traditionalists in this regard, adopted the Nyāya scheme of the pseudo-probans as *asiddha, viruddha, anaikāntika, kālātyayāpadiṣta* and *prakaraṇasama*. In [the] course of discussing *viparyaya* [erroneous] awareness *Kaumudī* records and refutes the theories of *viparyaya* according to the Prābhākaras, Sāṃkhyas, Mādhyamikas, Yogācāras and the Jainas. *Anyathākhyāti* has been accepted.

12. A detailed treatment on similarities and dissimilarities of the qualities is found in the work.

13. The other categories like action, generality, etc. have been treated at length.

14. The work hardly quotes any Vaiśesīka authority except in two cases: one, the *Vaiśeṣikasūtra* enumerating nine substances, and the other a part of the *Vaiśeṣikasūtra* enumerating qualities.

2. (PUṆḌARĪKĀKṢA) VIDYĀSĀGARA (1520)

Anantlal Thakur notes that Keśava Miśra Tarkācārya (1525), in his section of the *Nyāyasūtraprakāśikā* concerning God's causal activity, quotes one Vidyāsāgara's explanation of three *sūtras*. Thakur's article "Vidyāsāgara and his Nyāyasūtraṭīkā", Journal of the Oriental Institute 25, 1976, pp. 265-267, discusses who this Vidyāsāgara might be. He explores all those known to us as "Vidyāsāgaras", discovering that one Puṇḍarīksākṣa Vidyāsāgara is cited as cousin of Vāsudeva Sārvabhauma by D. C. Bhattacharya. This Vidyāsāgara is known as an author on grammar, and although no Nyāya works of his are apparently extant, he refers to a number of Nyāya works, including Rucidatta's *Tattvacintāmaniprakāśa*. Thakur says "he must have attained eminence during the age of Vāsudeva Sārvabhauma and Raghunātha Śiromaṇi". Thakur suggests that although Keśava Miśra was a Maithila and Vidyāsāgara a Bengali, "at the time of Keśavamiśra, relation between the logicians of Mithilā and Bengal was intimate and there is nothing known to stand against the proposed identification."

2.5 (PUṆḌARĪKĀKṢA) VIDYĀSĀGARA, *Ṭīkā* on Gautama's *Nyāyasūtras*

The work is lost.

3. DĀMODARA ṬHAKKURA (1520)

D. C. Bhattacharya tells us that Dāmodara Ṭhakkura was an elder brother of Maheśa Thakkura (1545), and was patronised by Saṅgarāma Śāha, who died in 1530. Bhagīratha Ṭhakkura (1535) was his younger brother (DCB, pp. 175, 200).

3.6. DĀMODARA ṬHAKKURA, *Mumukṣusarvasva*

A work by this name is attributed in NCat 9, p. 22a, to a Dāmodara Bhaṭṭa, son of Mauni Bhaṭṭa and pupil of Jagannāthānanda. A manuscript is listed in Hall, p. 111.

3.7. DĀMODARA ṬHAKKURA, *Setu* on a *Tarkaratnākara*

NCat 9, 22a also cites manuscripts of this work. It is not entirely clear whether these works are Nyāya works at all, and if so properly attributable to the author identified as the older brother of Bhagīratha.

4. KEŚAVA MIŚRA TARKĀCĀRYA (1525)

This author and teacher belonged to the Kaṭaka branch of the Sodarapura family of Mithilā. Umesh Mishra and D. C. Bhattacharya cite a verse which makes it evident that Keśava Miśra Tarkācārya "lived towards the end of his life at Kāśī, teaching students Nyāya and Vedānta", and infers from a passage in his *Nyāyasūtraprakāśa* that "he taught thousands of pupils and that his fame and reputation spread even beyond the ocean. He was called Vedāntavyāsa", according to the colophon of his *Prakāśa*. Umesh Mishra states that he also wrote a work called *Tarkatāṇḍava*. (See UM, pp. 368-370 and DCB, pp. 186-189.)

"He had four sons and his wife's name was Śobhā. He was thus a second cousin of Khāntara Miśra and two generations later than Śaṅkara Miśra. He must have written his works about 1525 A. D. and was the leading scholar evidently at the court of Mahārāja Lakṣmīnātha Kaṅsanārāyaṇa of Mithilā, the last monarch of the Oinwara dynasty. His name, therefore, is one more addition to the list of the galaxy of scholars belonging to the Sodarapura family that shed lustre on the cultural history of Mithilā for several centuries." (DCB, pp. 188-189.)

4.8. KEŚAVA MIŚRA TARKĀCĀRYA *Nyāyacandrikā* on Keśava Miśra's *Tarkabhāṣā*

Dineshchandra Bhattacharya gives some information on this work based on part of a manuscript preserved in Raj Library, Darbhanga (DCB p. 65).

4.9. KEŚAVA MIŚRA TARKĀCĀRYA, *Prakāśa* on Gautama's *Nyāyasūtras*

The work has been edited and published by Kisore Nath Jha, Allahabad 1970.

4.10. KEŚAVA MIŚRA TARKĀCĀRYA, *Saṃkhyāparimāṇa*

Dineshchandra Bhattacharya (DCB p. 188) provides a couple of verses which he found at the Darbhanga Raj Library (ms. no 43-2, foll. 31), from which Bhattacharya gleans additional information about the author, some of which is quoted above.

5. VIŚVAKARMAN (1525)

V. Varadachari notes: This author gives no information about himself except that his preceptor was Dāmodara. Rucidatta (ca. 1450) seems to be the latest writer mentioned by him. So Viśvakarman may be supposed to have lived in the first half of the 16th century. He appears to have written a work named *Prajñāpradīpa* on grammar, as it is mentioned by him in the *Nyāyapradīpa* (p. 118 of E). Viśvakarman's proficiency in grammar is revealed in almost all passages. He offers the *vigrahavākya* for compound words and discusses the correctness of their formation by citing relevant rules from the *Aṣṭādhyāyī*. (These remarks were conveyed through Varadachari's personal comments on this author, conveyed for the purpose of this entry.)

5.11. VIŚVAKARMAN, *Nyāyapradīpa* on Keśava Miśra's *Tarkabhāṣā*

"E" references are to the edition by Surendralala Gosvamin, first published in The Pandit in 1900-1901; numbered references are to the reprint published at Benares in 1922. There is no translation. Roman numerals reflect the sections of the summary of the *Tarkabhāṣā* in EnInPh Volume Two, pp. 664-667.

The commentary shows the influence of Cennubhaṭṭa's

commentary, according to V. Varadachari.

Summary by V. Varadachari

IV. (E28) Gaṅgeśa's explanation of *sāmānyalakṣaṇa-sannikarṣa,* one of the three kinds of extraordinary perception, is reviewed. Our author then mentions the view of early scholars who held that relation with what is present can make known what is not near, what is past and what will come into being in the future.

(E29) All three kinds of extraordinary perception are construction-filled cognitions produced by a relation, being different from awareness of God or construction-free awarenesses which are not produced from relating things. According to some scholars the internal organ provides the relating, while others say that the external sense organs provide it. Still others hold that awareness of the qualifier as related to the qualified is the specific excellence (*guṇa*) whenever the awareness is true; when there is relation which contradicts an erroneous awareness this is produced by a relation with what is validly perceived. The author of the *Ratnakośa* (Taraṇi Miśra) held that such correcting awarenesses arise from *adṛṣṭa*.

V. (E29) Consideration (*liṅgaparāmarśa*), according to Uddyotakara (the Vārttikakāra), is the third awareness in inferring which arises in the form of "this has smoke pervaded by fire". According to Gaṅgeśa inference is (not consideration but) awareness of pervasion. According to Udayana inference is the *hetu* (= *liṅga*) when it is subsumed under pervasion. This last view is wrong, since in cases where the *hetu* is past or future inference could not arise, as its *hetu* is not present to be subsumed.

Objection: Consideration, being the final knowledge, cannot be an instrument (*vyāpāra*). But since causality, i.e. instrumentality, is absent consideration cannot be the inferential means of knowledge as Uddyotakara claims. So there is a mistake here.

Answer: No. On Uddyotakara's theory, which is followed here, as long as there is activity (*kriyā*) there is instrumentality (*karaṇatva*). Thus there is no fault if there is lack of instrumentality in consideration.

(E34) According to the *Nyāyakandalī* inferential awareness arises from perception of the *hetu* when there is

memory of pervasion.

(E45) Counterbalance (*satpratipakṣa*) (or neutralization) (*prakaraṇasama*) and mistimed (*kālātyayāpadiṣṭa*) and being sublated (*bādhita*) as a group differ from the other three fallacies in that the former group are features which directly obstruct the rise of inference, whereas the members of the latter group obstruct inference by interrupting the cause of inference from functioning.

(E46-47) There are three kinds of obstruction (*upādhi*): (1) *śuddhasādhyāvyāpaka*, (2) *pakṣadharmāvacchinna-sādhyāvyāpaka,* and (3) *sādhanāvacchinnasādhyāvyāpaka*. These are illustrated: (1) in "this possesses smoke, because (it possesses) fire", either possession of wet fuel or possession of fire made from wet fuel are obstructions. (2) In "wind is perceptible, because it has perceptible touch", possession of manifested color, which pervades perceptibility as limited to external substances, is an obstruction. (3) In "the self is perceptible, because it is a produced substance", possession of perceptible size is an obstruction.

(E47) The word "*anaikāntika*" (a synonym for "*savyabhicāra*) is analyzed as meaning "that which does not have certainty of pervasion (*anta,* derived from *an*, to go) by the particular form of the *sādhya*".

(E49) Two views on counterbalance that are not admitted in the Nyāya tradition are noted. According to one, whose source is not identified, counterbalance is having a *hetu* whose effect is obstructed by another *hetu* of equal strength. The other view was held by Taraṇi Miśra, author of the *Ratnakośa*. According to him, the materials which are needed for the two mutually contradictory inferential cognitions give rise to an inferential cognition which has the form of a doubt and which concerns both the contradictory cognitions.

VII. (E52) Expectancy (*ākāṅkṣā*) is defined as the knower's desire to know the things (*artha*) corresponding to the words (*pada*). This is based on the definition of ancient Naiyāyikas. Another view referred to is that expectancy consist in a word's becoming incapable of conveying a sense in the absence of another word.

(E53) Fitness (*yogyatā*) is defined as the capacity of words to get construed with each other. Another view is also referred to. According to it, when a word is used along with another and fitness is not available, knowledge does not arise

about its sense. This is a negative definition [1]

(E59) The special excellence which characterizes a valid piece of verbal testimony consists in the validity of the speaker's intended meaning (*tātparya*) or in its semantic fitness.

X. (E80) A sense-organ is defined in the *Tarkabhāṣā* as that which is in contact with the body, is the specific cause of awareness, and is beyond the senses. After commenting on this definition, Viśvakarman refers to a definition offered by others, according to which a sense-organ is the locus of a contact with the internal organ which contact produces awareness but does not produce memory.

(E94-95) What is the meaning of the word "*ākāśa*"? Some say that the word has only the power to designated an individual, and that *ākāśatva* is the imposed property (*upādhi*) corresponding to that power. As a result the word "*ākāśa*" does not produce a memory of the construction-free (*niṣprakāraka*) sort. Or else, they add, when because the traces are not activated no memory of a portion of *ākāśa* arises, then there can be no construction-free recollection. To this Viśvakarman objects. If words can produce an awareness of their sense even when there is no significative force (*vṛtti*) then a word like "cow-ness" (*gotva*) could not signify the meaning of the word "cow".

(E101) There must be variegated color and variegated touch, because we have the awareness that there is a single variegated-color in an object. That is, color and touch are locus-pervading, and so it is not possible to admit two colors or two tactile qualities in one and the same object. If this is not admitted an object might have no color, or no touch, and thus be ungraspable by the respective sense-organs.

Objection: Then we must also admit variegated taste in addition to the six kinds of taste regularly listed, since it is experienced in such things as the myrobalan.

Answer: No, since the organ of taste does not grasp the locus of taste. So, even though an object has no taste, it can still be grasped by some other organ.

(E112-113) Inherence is perceptible in Nyāya, but not in Vaiśeṣika, where it is said to be known only by inference.

[1] Vardhamāna refers to this definition in his commentary on *Nyāyakusumāñjali* 3. Annambhaṭṭa holds this view in his *Tarkasaṃgraha*, *Śabda* section.

(E113-115) The absolute absence of blue jar is a distinct entity from the absolute absence of yellow jar, for the one has the other as [part of] its locus. Similarly, the difference between a mutual absence and a relational absence lies in their loci. On the other hand, the contrast between (1) absolute absence of a pot and its counterpositive (viz. pot), and (2) prior and posterior absence of pot (since (1) and (2) have the same locus) lies in their being different kinds of absences. The limiter (*avacchedaka*) of the counterpositive-ness in the case of a mutual absence is absence itself.

Objection: Then it follows that since *ākāśa* is never absent there can be no absolute absence of *ākāśa*.

Answer: That's true. However, the traditionalists (*sampradāyaka*) argue that there is a counterpositive for the absence of *ākāśa*, namely the absence of that absence. That a thing *x* has the absence of its own absence is proved by whatever means of awareness grasps *x*.

(E121) In discussing liberation Viśvakarman refers to various views. It is often said that karma will not be exhausted unless all of it is experienced, but this is applicable only to persons who are in a hurry to get rid of bondage; one can also wait for the proper time for release, according to Udayana. *Bhagavadgītā* IV. 37 declares that all actions are burned up in the fire of knowledge, which appears to contradict Udayana's notion. However, the traditionalists approve of both action and knowledge as means to liberation.

Objection: It is stated (*Muṇḍaka Upaniṣad* II.2.8) that when the Supreme Being is seen all one's karma is destroyed.

Answer: This does not contradict our view, since what is meant is that karma is destroyed for one who has gotten knowledge of the truth, not that knowledge itself destroys karma.

But Rucidatta holds a different view. According to him that karma which will produce frustration can only be gotten rid of by experiencing its results. Knowledge can only destroy karma which will not produce frustrations.[1]

[1] This requires an explanation. What Rucidatta could have meant may be this. Knowledge of reality must be acquired in order to exhaust the results of one's deeds, but before getting that knowledge or during the period of acquiring it, if there arise miseries, they have to be endured at all costs, for then only the deeds which give rise to such frustrations would get exhausted.

XI. (E124) Doubt is of two kinds, *sambhāvanā* and what is other than that. *Sambhāvanā* is a doubt which arises about one of two possible alternatives. In this it differs from doubt which arises because both the alternatives are unclear (e.g., "is it a post or a man?"). In *sambhāvanā* we confront something well known but come to doubt that it actually is what we thought it was.

XVI. (E120) Viśvakarman illustrates how *tarka* can assist several of the instruments of knowledge. But it is also mentioned that some say that *tarka* is only helpful in removing doubt or contradictions, and does not actually assist any of the instruments of knowledge.[1]

XVIII. (E139) Recognition (*pratyabhijñā*) is produced by both perception and traces, says the *Tarkabhāṣā*. But the traditionalists don't agree. According to them memory alone produces recognition; traces are dispensable antecedents.

6. NĀRĀYAṆA BHAṬṬA (1530)

There is a manuscript of work #6.12 dated 1560, so the author must have lived sometime before that. Suppose we guess 1530?

6.12. NĀRĀYAṆA BHAṬṬA, *Ṭīkā* on Keśava Miśra's *Tarkabhāṣā*

Is this the work referred to by Thangaswami Sarma on p. 147 of DM? In any case, a work by an author with this name is cited in NCat 8, 120b, and manuscript citations of it are to be found there.

7. HARIDĀSA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA (1530)

This writer seems to have lived from 1480 to 1540, and to have studied with Vāsudeva Sārvabhauma. There is a tradition that he studied in Mithila. Otherwise we know little about him.

[1] It is not clear whose view the author is referring to here. Many writers admit for *tarka* both these functions, while it must be said that some scholars, such as Udayana and Vallabha, lay stress on the latter.

7.13. HARIDĀSA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Vṛtti* or *Haridāsī* on Udayana's *Nyāyakusumāñjali*

This is a widely-studied commentary; indeed, Umesh Mishra (UM, p. 419) says "it has become so popular that even the Nyāya scholars have forgotten that Udayana wrote his *Kusumāñjali* both in prose and poetry", since this brief commentary deals only with the *kārikās*. "E" references are to the edition by Narayana Misra, Varanasi 1986.

Summarized by V. Varadachari

(E99) The word "*māyā*" is taken in the sense of *adṛṣṭa*.

(E110) At the time of creation God assumes two bodies, one for propagating the tradition, the other body of the pupil taking instruction from him.[1]

(E204-206) While interpreting *kārikā* 1 of Book Five Haridāsa distinguishes five interpretations of the word "effect", which he views as five mistaken ways of viewing the world as a product or effect.

(E258) Udayana's view of injunction (*vidhi*) is explained as the conveying of the intention of the speaker. Haridāsa observes that God's wish is all-encompassing. It cannot be denied, as otherwise it will be sublated. Desire will have to be admitted as unrelated to evil, and it is unthinkable to admit this into a world that God wished to produce. Thus there is heaviness, and so Haridāsa boldly prefers to have the traditional view in the place of Udayana's desire.

7.14. HARIDĀSA NYĀYĀLĀṂKĀRA BHAṬṬĀCĀRYA, *Prakāśa* on Gaṅgeśa's *Tattvacintāmaṇi*

NCat 8, p. 26a, notes a *Śabdamaṇiprakāśa* by Haridāsa Bhaṭṭācārya of Bengal, and lists a number of manuscript citations. Gaurinath Shastri informs us that a complete manuscript of this work is preserved in the library of Dacca University.

7.15. HARIDĀSA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Ṭippaṇī* on Jayadeva's *Tattvacintāmaṇyāloka*

The work is mentioned in GK p. 57, and two or three

[1] There is much sense here, since no single self could be chosen at that time as having acquired fitness to receive instruction.

citations given at NCat 8, 42b. It apparently covered the entire work, of which three sections are available.

8. BALABHADRA MIŚRA (1530)

We know next to nothing about this prolific writer, except that he was apparently from Varanasi, and must have lived prior to 1556, since a manuscript of his commentary on *Tarkabhāṣā* bears that date. He was probably the teacher of Viśvanātha Tīrtha, Padmanābha Miśra and Govardhana Miśra.

8.16. BALABHADRA MIŚRA, *Ṭīkā* on Sarvadeva's *Pramāṇamañjarī*

The work has been edited at least twice, once by Pattabhirama Sastri in 1953 and again by Gita Banerji (Volume One only) in 1988.

8.17. BALABHADRA MIŚRA, *Yuktikalpadruma* on Vardhamāna's *Kiraṇāvalīprakāśa*

NCat IV, pp. 154b-155a remarks: "This is evidently Balabhadra's Cc. (subcommentary) *Yuktikalpadruma* or *Y(uktika)Kāmadhenu* on Vardhamāna's C(ommentary) referred to by his son Padmanābha as the basis of his own." Manuscript references are given.

On the other hand, Anantalal Thakur does not know a commentary by Balabhadra on the *Kiraṇāvalīprakaśa* by the title *Yuktikalpadruma*, but has this to say about a commentary on the work by Balabhadra titled *Vimala*, which we may assume to be the same work. "A fragmentary manuscript of Balabhadra's *Dravya-(Kiraṇāvalī)-Prakāśa-Vimala* is preserved in Pune (Ms. no. 754 of 1884-7, fols. 70). The complete text must have been voluminous because the last folio of the manuscript covered only the 89th page of the *Dravyaprakāśa* of the Bibliotheca Indica Series. Balabhadra quotes a number of *Dravyapragalbhī*'s lines in the commentary. Balabhadra's son Padmanābha, in his *Vardhamānendu* mentions his father's commentary (*Balabhadrī*) on a number of occasion...Padmanābha in his *Setu* (a commentary on the *Padārthadharmasaṃgraha*) quite clearly mentions this commentary of his father....Practically by the familiarity and honor of this text in academic society the *Dravyapragalbhī* (a commentary by Pragalbha on *Dravyaprakāśa*) was discarded" (ODVS, p. 297).

8.18. BALABHADRA MIŚRA, *Sandarbha* on Śivāditya's *Saptapadārthī*

"E" references are to the edition by N. C. Bhattacharya in Calcutta Sanskrit Series 7, 1934.

Summary by V. Varadachari

(E147) The definition of "category" as "object of true awareness" is a clarifying (*uparañjaka*) definition, not a differentiating (*vyāvartaka*) one.

(E148) Various views about the classification of kinds of absence are noted. According to some there are two kinds of absences, relational (*saṃsarga*) and mutual (*anyonya*), and three kinds of relational absence, viz., prior, posterior and absolute. Some add a fourth kind of relational absence called "temporary absence" (*sāmayikābhāva*), which gets produced and destroyed. Balabhadra lists the kinds of mutual absence as these: the absence of a thing's own nature, difference, separateness and dissimilarity.

(E148) The view that there are eleven spatial directions is identified as the view of "a different school".

(E149) The author questions the admission of variegated taste.

(E149) Even though the text mentions just two kinds of contact, Balabhadra thinks one must differentiate the kind of contact produced from motion of one conjunct from the kind produced by motion of both conjuncts.

(E150) *Tarka* cannot be a kind of doubt (as the text asserts), since it is classified as a kind of error.[1]

Is construction-free awareness valid or invalid? Balabhadra indicates that there is difference of opinion on this question. He suggests that it depends on how "valid awareness" is defined. If valid awareness is defined as awareness which has a common locus with what is different from error, then construction-free awareness is included with valid awareness. If valid awareness is defined as an awareness attributing a chief

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[1] *Tarka* is by itself not a means of knowledge but only an aid to support the *pramāṇa*. Being of the form of knowledge, it should be brought under the erroneous kind, because it may start working with the coloring of doubt. Yet doubt does not fully govern it. It actually has the tinge of erroneous knowledge.

qualifier to *x* where that qualifier actually exists in *x*, then construction-free awareness (having no chief qualifier) falls outside of valid awareness.

(E158) Darkness is defined (in the text) as absence with dark color superimposed on it. Balabhadra points out that since the absence mentioned here is the absence of light, it is wrong to say that darkness is dark color. An alternative explanation is that darkness is experienced as having dark color superimposed on it.

8.19. BALABHADRA MIŚRA, *Prakāśa or Balabhadrasandarbha* on Keśava Miśra's *Tarkabhāṣā*

NCat 8, p. 120 lists a host of manuscript citations of this work.

8.20. BALABHADRA MIŚRA, *Sārasaṃgraha* on Varadarāja's *Tārkikarakṣā*

NCat 8, p. 162 cites Baroda manuscript locations.

9. RAGHUPATI MIŚRA (1535)

Umesh Mishra and Gopinath Kaviraj both state that Raghupati was the son of Rucidatta Miśra, author #44 in EnInPh Volume 6. A manuscript of one of his works is dated 1587. He also seems to come from Varanasi.

9.21. RAGHUPATI MIŚRA, *Parīkṣā* on Gaṅgeśa's *Tattvacintāmaṇi*

GK, p. 48 notes that "two Mss., one of the *Śabda Khaṇḍa* (*Śabdamaṇiparīkṣā*, dated Saṃ. 1664 = A.D. 1587) and the other of the *Anumāna Khaṇḍa*, exist in the Govt. Sanskrit Library, Benares."

9.22. RAGHUPATI MIŚRA, Commentary on Jayadeva Miśra's *Tattvacintāmanyāloka*

A number of citations of manuscripts of this work are given at NCat 8, p. 42.

10. BHAGĪRATHA or MEGHA ṬHAKKURA (1535)

The younger brother of Dāmodara Ṭhakkura and elder brother of Maheśa Ṭhakkura, Bhagīratha is said to have studied

with Jayadeva Paṇḍita. His father's name was Candrapati, his mother's Dhīrā. "He was the elder brother (second in line) of Maheśa Ṭhakkura, the Raja of Darbhanga", says Thakur (ODVS p. 297). Dineshchandra Bhattacharya (DCB p. 172) calls him "a celebrated logician of Mithilā". Dineshchandra makes Bhagīratha and Raghunātha Śiromaṇi contemporaries and dates them about 1500, but says they "did not see the works of each other." According to Gopinath Kaviraj Bhagīratha "distinguished himself as a scholar of some renown at the early age of 20" (GK, p. 48). Manuscripts of his works dating from 1588 or earlier exist. Given the dating of his brothers adopted here, it would seem more likely to suppose that he would have been 60 years old around 1535. Of course, we have no idea at what age he wrote his various commentaries.

10.23. BHAGĪRATHA ṬHAKKURA, *Prakāśikā* on Udayana's *Ātmatattvaviveka*

"E" refers to the edition by V. P. Dvivedin and L. S. Dravid, Bibliotheca Indica 170, 1907-1939. Bhagīratha's commentary is complete except for the passages of the original corresponding to E831 and 877-933. The two concluding *ślokas* of the text do not contain his commentary. There is a lacuna on p. 665 and the commentary on p. 877 has an abrupt end. Evidently , the commentary on the passages in these pages is missing.

Summary by V. Varadachari

Bhagīratha begins this work with a prayer to God Narasiṃha, suggesting the author's leaning to the concept of Godhead held by the Hindu tradition. The word "*vedāntasārasarvasvam*" used by him as an attribute of Narasiṃha indicates that he follows the Vedāntic tradition for this concept. He was thus not sticking to the Nyāya tradition exclusively.

He does not follow Śaṃkara Miśra in criticizing the views of Advaita Vedānta. Udayana snubs the Yogācāra Buddhist without dragging in the Advaita system in his dispute with Nyāya. Bhagīratha remarks that the target of attack is not the Vedānta (Advaita) point of view, since it is not relevant in the context. Śaṃkara Miśra, on the other hand, notes that the author notes derisively that the Vedānta system can be easily refuted.

The technical language of Navyanyāya is adopted by Bhagīratha for the most part in discussions of the doctrine of the system.

(E825-828) God's existence is proved in the Nyāya system on the ground that the universe is a product whose agent must then be an omniscient person, God. While commenting on this, the author discusses whether God has a body, what is meant by agency and by material cause. By the word "universe" Bhagīratha understands a dyad, since creation starts with its formation.[1]

(E865-866) In the context of discussing the nature of pervasion, which requires to be shown free from obstruction, Bhagīratha makes some interesting remarks. Repeated observations are to be undertaken as many times as necessary to avoid sublation through the *vipakṣa*. Bhagīratha does not recognize that observation of other cases is essential. Pervasion can be apprehended through *tarka* in certain cases only. It may be self-evident in some cases. The author states that pervasion and obstruction were dealt within greater detail in his (lost) work *Pramāṇacatuṣkopāya*.

(E571-576) Difference is admitted in the Nyāya school to be present and to be cognized as such. An intricate discussion ensues on the connotations of the words *bheda, svarūpa, vaidharmya* and *abhāva*. He shows that *vaidharmya* can be understood through *svarūpa*. While discussing where difference lies, whether in differentiated or undifferentiated objects, the author refutes the objection raised by Śrīharṣa as to whether cow-ness is cow or non-cow.

Some scholars take *bheda* as non-different from mutual and absolute absence. The author states that all these matters were treated by him at great length in the *Dvitīyādhyāyaprakāśa,* evidently his commentary on Udayana's *Pariśuddhi*. He makes clear the difference between *svarūpa, anyonyābhāva,* and *vaidharmya* through the respective illustrations "this is jar", "this is not jar", "this is made up of threads". He refers seven times to the views of others while treating this matter.

(E779-780) While rejecting the Buddhist theory of

[1]It is worth noting that the word "*vivādādhyāsitam*" used in the text is said not to apply to the dyad according to Vardhamāna. Bhagīratha must have had this in mind.

ālayavijñāna and *pravṛttivijñāna*, the commentator discusses the question of one of them being the cause of the other. He shows that these two do not exist at all and that if they were to exist there would be no correlation between them. If there were a correlation, then one should be expected to have several functions, which is not born out by experience.

The commentary provides much information on various aspects of Nyāya and Buddhist systems of thought. Certain arguments of the Buddhists are identified as defective, involving many ways to lose an argument (*nigrahasthāna*) (pp. 171.175, 591). The theory of error of the Nyāya system receives a merited treatment (672-674). The author refers frequently to the views of others, quite often leaving them with no reply. Perhaps such views were held by Naiyāyikas themselves. Some of these views are traceable to the commentary of Śaṃkara Miśra, whose name is not mentioned.

Neither Śaṃkara Miśra nor Bhagīratha subscribe to the treatment of the absence of an absence as a separate category. This concept must have been in vogue only a little before their period.

10.24. BHAGĪRATHA ṬHAKKURA, *Bhāvaprakāśikā* on Vardhamāna's *Kiraṇāvalīprakāśa*

Alternatively this work is known as *-Jaladā* or *-Prakāśikā*. Manuscript citations are given at NCat 4, 155a. According to Thakur (ODVS p. 297) both the *dravya* and *guṇa* portions "are available in manuscript form. These two works, i.e, *Prakāśikās* are also called *Megha (Dravyamegha* and *Guṇamegha)* after Bhagīratha's nickname 'Megha'. *Guṇajaladā* is another name of *Guṇamegha*.."

10.25. BHAGĪRATHA ṬHAKKURA, *Prakāśikā* or *Jaladā* on Vardhamāna's *Nyāyakusumāñjaliprakāśa*

"E" references are to the edition by Dharmadatta Jha, Kashi Sanskrit Series 30, 1912. Section numbering follows that of the summary of the *Nyāyakusumāñjali* in EnInPh Volume II and also to the numbering of the summary of Vardhamāna's commentary in Volume VI.

Summary by V. Varadachari

I.3 (E14-15) The followers of the Upaniṣads held God to be conscious (*buddha*), which Vardhamāna takes to mean that

He has the nature of self-illuminating awareness (*svaprakāśa-jñānātmaka*). Vardhamāna remarks that other things could not be illumined in the absence of "a second" (i.e., God) and that this feature is quite acceptable to "both Vedāntins". Bhagīratha observes that the Ekadaṇḍins and Tridaṇḍins are meant here. Pure non-difference has no place in the school of the Tridaṇḍins, since difference is admitted by them. Yet non-difference is also admitted by them. Or, the two systems have the common feature of admitting God as *buddha*.

I.4 (E44-45) Udayana's text states that enjoyment is restricted to each and every self. Vardhamāna adds that simplicity supports this, and that *adṛṣṭa*, which is restricted to each and every self, proves it. Bhagīratha takes the word for "simplicity" (*lāghava*) in another way and arrives at the same meaning. Where *adṛṣṭa* resides, there rises the direct experience of pleasure and pain. Any other way of explaining this would lead to logical heaviness. Without rejecting the above interpretation, Bhagīratha remarks that *adṛṣṭa* has to be admitted to be restricted to each self in order to avoid the faults which would arise if what is done goes unrewarded and what is not done has results.

I.6 (E74-77) While discussing how milk changes into curds, the author discusses in minute detail the process of change of one substance into another through a corresponding change in the non-inherence causes like smell, taste and others which identify the different substances.

(E81) The passage "*apohavāde niyamo nirastaḥ*" is interpreted to mean "invariable presence is set aside when *apohavāda* is maintained." That is, the Buddhist concept of concomitance cannot stand when they seek to maintain causal relations on the basis of *apohavāda*.

I.10 (E110-121) The topic of absence plays a prominent role in the Nyāya-Vaiśeṣika metaphysics and logic. Apart from the significance attached to its status as a category, how it is conceived to hold its place in the concept of causal relation deserves study. Udayana made such a substantial contribution to this aspect that those who came later could only reproduce his treatment *verbatim* or analyse his passages seeking to strengthen the sense of those passages proving at the same time that there is no reason to find fault with them. This receives a detailed treatment here.

I.13 (E152-166) The nature of destruction (*dhvaṃsa*) and its bearing on *pralaya* receive an analytical study. The author discusses the concept of cause along with the five kinds of dispensable antecedent (*anyathāsiddha*).

II.1 (E263) The commentator makes frequent references to the interpretations offered by other scholars. Here, attention is drawn to the intensity of a sound. There is variation in the intensity of sounds. This is a natural trait of sounds and so cannot be treated as superimposed on them. Intensity which was experienced before and then recollected cannot be superimposed. If it can be, then it can as well be admitted as not apprehended. Bhagīratha refers to the view of some scholars who hold that superimposition of intensity could not be made in the present birth. There is nothing to sublate this, if arousing the traces formed in previous births is what is meant here.

II.4 (E309) The category of *māyā* is not admitted in the Nyāya system, and erroneous awareness cannot be attributed to God, so Vardhamāna interprets the reference to *māyā* in II.4 as referring to something accessory to the creation and destruction of the world. Bhagīratha takes the word "*māyā*" in the sense of "*adṛṣṭa*". God is said to play, as it were, with this *adṛṣṭa*. The "as it were" indicates that there is no room for play in the case of God. Again, the *Prakāśa* takes the word "*bhūyāsam*" in the sense of a wish to exist. Bhagīratha observes that the wish to exist goes against the desire to get liberated, and hence the word should be taken to mean a wish that one should live bowing to God.

III.1 (E325) There is a way of commenting that consists in explaining the passage, admitting it to be fully acceptable as it stands, and then saying "but really" and providing the commentator's personal view. An example of this occurs in this passage. The text states that if the nature of an internal organ is to come into contact with only one self, then selves would not have any nature in the state of liberation, since at that point the selves do not have any contact with an internal organ. This passage does not convey the sense intended. During the state of liberation there is no room for the self to get related to the internal organ. Hence Vardhamāna takes the word "*mukti*" as "*jīvanmukti*", that is, the state of release from bondage during the lifetime of a self on earth. Bhagīratha explains this as capable of yielding two meanings. According to one, a single mind is admitted to give rise to awareness of a single self. The other is that a single mind gives rise to an awareness which the self with which it is connected could become aware of. This

does not however happen in the state of liberation. Then he observes that really the word "liberation" in the text should be taken to intend liberation of the *nirvāṇa* kind. An object has its nature as long as it continues to exist. The text therefore means that the self may lose, in the state of liberation, its nature, which consists in apprehending itself. Here the commentator does not express his disapproval of the interpretation offered by Vardhamāna, yet he seeks to defend and maintain the view contained in the text.

III.7 (E344) *Tarka* is dealt with in reference to the views held by several writers on Nyāya including Jayadeva. In this context the opinion of Vardhamāna's *Prameyatattvabodha* is cited. When doubt arises regarding pervasion desire to ascertain the truth arises. This desire concerns itself at the outset with many things which are opposed to each other. This desire prevents appeal to any instrument of knowledge which might apprehend the real situation. The passage cited from the *Prameyatattvabodha* means *tarka* does not operate when an instrument of knowledge is already available. There is, of course, difference of opinion as to when *tarka* is to be employed. According to some scholars, it is to be employed after adopting the inferential method; according to others, among whom the author of the *Prameyatattvabodha* is to be included, it is to be used before inferring. According to the latter view, *tarka* is used to scrutinize the subject matter of inference and it apprehends pervasion.

(E356-359) An obstruction is defined by Bhagīratha as that which does not pervade the *hetu* while being employed as the *sādhya*. The author refers here to a view which holds that the *pakṣa* cannot suffer from an obstruction. Another view is noted as held by a section of the Naiyāyikas, who say that obstruction is present in the *pakṣa* when it pervades the relation between *sādhya* and *hetu*. This view is rejected since what exists in the *pakṣa* may not be an obstruction, for in the case of the judgment "a jar is perceptible, being a substance", possession of perceptible size pervading "being a *sādhya* limited by substanceness" becomes an obstruction.

III.12 (E387-388) Some argue that simplicity demands the rejection of comparison as an independent instrument of knowledge, since the *sāmānyatodṛṣṭa* kind of inference serves the purpose held to be achieved through comparison. Bhagīratha offers a lengthy argument defending the Nyāya position. Simplicity should of course be welcomed, but it can be

considered only with reference to the specific feature which involves comparison; it is not helpful in explaining what makes the word "*gavaya*" be used to denote an animal which bears a likeness to a cow. Besides, the *hetu*, similarity with a cow, does not have the power to determine that a thing is named by "*gavaya*". Moreover, any inference held to serve the purpose of comparison must be of the only-negative variety, since the *sādhya* is not then known to serve as the occasion for using "*gavaya*". It is through comparison that a relation is established between *gavayatva* and the animal *gavaya*.

(E388) It does not stand to reason that comparison should be considered to be an independent instrument of knowledge on the ground that a different kind of cognition is found to arise on the strength of an after-cognition "I compare". In comparison the awareness arrived at is concerned with the naming of an object based on understanding a similarity. After-cognition has no role here. However, it does have a role in the awareness expressed in "I compare the face with the moon".

(Even more valuable than his treatment of topics of this kind are Bhagīratha's comments which he offers frequently in his interpretation of the *Prakāśa*. In some contexts he remarks that more details on the matter are to be found elsewhere. For instance, he write thus while commenting on *tarka* (p. 350) and *vidhi* (p. 561). It is not clear whether the author refers to the treatment given in some other works of his or of other writers.)

IV.4 (E473) Udayana points out that the internal organ assists in apprehending objects grasped by the senses as well as those not so grasped but brought there otherwise. Vardhamāna notes this and classifies the cases under two heads: those produced and those not produced, and that the latter may be beyond the reach of the senses. At this, Bhagīratha remarks that the awareness that is not then produced shall be taken to have been produced through extraordinary perception. Vardhamāna notes that in such cases the contact may be classed as qualifierness of what is in contact (*saṃyuktaviśeṣaṇatā*). Bhagīratha notes that this implies some contact other than traces.

V.5 (E514) It is stated in Udayana's text that the size of an atom cannot cause the size of a dyad, or the size of a dyad the size of a triad, the reason being that these are the sizes of eternal objects and are minimally small. Vardhamāna notes that the largest size (*paramamahat parimāṇa*) could have been stated as the reason by way of example, except that the

opponent would not admit it. So another reason, minimally small size, is given. Bhagīratha observes that this means the size of the internal organ, for example. Having said so, he notes that the purport of this argument lies in offering the same illustration for the reason offered before, namely: because it is the size of an eternal substance. Furthermore it is said that the first reason, having the size of an eternal object, is not applicable to the size of a dyad, which is not eternal, and so that first reason is inapplicable. That is why the other reason, viz. minimally small size, is offered.

(E518) Among the opinions held by certain sections of the Nyāya school, the traditionalists are stated to have held that if the instrument of knowledge which apprehends the non-inherence cause of the size of a dyad also apprehends the size of an atom then over-complexity would set in since two non-inherence causes are provided for two sizes. Bhagīratha notes that this explanation is not to the liking of Vardhamāna and this dislike is then explained. When God's existence is not established duality in the atoms is also not established--but size is established. Hence size itself should be cited as the cause.

5.16 (E570) Udayana writes that if God's existence is not admitted, then aspects of liberation like *sālokya, sāyujya* and the like would be only mythical, with the result that no one would take up the worship of God. Vardhamāna includes *sārūpya* in the list of these aspects on the strength of the word *ādi* used in the text. Bhagīratha takes this word "*sārūpya*" to mean possession of the same form as that of the deity marked by Garuḍa, club (*gadā*), discus (*cakra*), etc. This suggests that Bhagīratha was familiar with the tenets of Vaiṣṇavism.

10.26. BHAGĪRATHA ṬHAKKURA, *Vivṛti* on Vardhamāna's *Nyāyalīlāvatīprakāśa*

"E" references are to the Chowkhamba Sanskrit Series edition (see EnInPh Bibliography, #654.1.4). Section numberings correspond to those in the summary of the *Nyāyalīlāvatī* in EnInPh Volume II.

Summary by V. Varadachari

(E1-3) Invocation. The introductory verse of the *Līlāvatī* has application both to Śiva and to Viṣṇu, speaking as it does of "Puruṣottama." After referring to the views of others on the meaning and analysis of that word, Bhagīratha takes the word

"*uttama*" in the sense of omniscience and other qualities which evoke the offering of obeisance to God.

9 (E80-86) There is a lengthy discussion on possession (*svam*) and what a woman gets by way of settlement. Her right over it and the right to dispose of it are dealt with at great length.

12 (E142) Prabhākara Upādhyāya is identified as one who held that the taste of *haritakī* is variegated.[1]

21 (E305) Variegated taste is to be admitted on the basis of the perception of a substance, on analogy with that of color.

24 (E355) Prabhākara Upādhyāya is said here to have held that duality (*dvitva*) is produced by the awareness that the unity in one thing is different from the unity in another, while triple-ness (*tritva*) is produced by the awareness of unity together with duality.

40 [The following section is taken from Sitansusekhar Bagchi's *Inductive Reasoning* (Calcutta 1953), Chapter II, pp. 19-26]: "Reasoning is conventionally classed under two heads, namely, (1) that which removes an obstacle to the clear understanding of the subject-matter (*viṣayapariśodhaka*); (2) that which is conducive to the knowledge of the universal concomitance between the *hetu* and the *sādhya* (*vyāptigrāhaka*). The first variety of reasoning sponsored by Vācaspati and his followers is rejected by Śrīvallabha.... Śrīvallabha's views on reasoning can be summed up in brief as follows. Of the two types of reasoning sponsored by the ancients Śrivāllabha only recognizes the necessity of the second type....(T)he position maintained by Śrīvallabha in his *Nyayālīlāvatī* is entirely different from that of Udayana....

"Bhagīratha Ṭhakkura....does not think that Śrīvallabha's summary rejection of Udayana's position is absolutely infallible. He asserts that reasoning of the first type is of service even in inference by eliminating inquiry about the opposite possibility as maintained by Udayana....Let us suppose that a man perceives smoke in a hill and remembers that smoke is necessarily concomitant with fire. Is it possible that a man should come to have doubt regarding the possibility of absence of fire? A doubt of this kind can be resolved only by the

[1] Prabhākara Upādhyāya is #43 in EnInPh Volume II. The present reference shows that Prabhākara Upādhyāya wrote a commentary on the *Nyāyalīlāvatī*. Cf. DB, p. 75.

knowledge of the necessary relation of the *hetu* and the *sādhya*. But such knowledge is *ex hypothesi* present at the time. How can there be any doubt about the opposite alternative? So reasoning has no *raison d'etre* in such a situation... This has been the argument of Śrīvallabha for rejection of this type of reasoning.

"Bhagīratha observes in reply that although doubt about the contrary possibility does not spontaneously arise after the combined knowledge of the presence and an antecedent doubt of the kind has been removed by the latter, yet the possibility of doubt, due to the operation of an opposite cognitive instrument, is not precluded. It is not universally true that the knowledge of the combined premises necessarily culminates in the knowledge of the conclusion. Were it so, contradicted reason (*bādha*) or countermanded reason (*satpratipakṣa*) could not be included in the list of fallacies...

"Combined knowledge of the premises fails to lead to the conclusion if it has been thwarted by knowledge of the opposite truth. What is true of knowledge of the opposite is also true of doubt about the opposite, with this difference that knowledge of the opposite permanently precludes the knowledge of the conclusion, whereas doubt or diversion of inquiry produced by it operates as a temporary setback. The removal of the diversion is effected by reasoning, and with the removal of this impediment the previous knowledge of the major and the minor premisses leads to the knowledge of the conclusion.....Thus....reasoning serves as an auxiliary to the condition of inference after it has set to work; that is, in other words, reasoning is regarded as a subsequent sub-organ (*uttarāṅga*) of the instrument of inference. Bhagīratha thus substantiates the claim of he first type of reasoning in opposition to Śrīvallabha who repudiated it."

48 (E608-609) The author of *Ratnakośa* is mentioned as having held that that which leads to fallacious inferential cognitions is a fallacious *hetu*.

67 (E760-761) Bhagīratha notes that the definition of awareness (*buddhi*) involves illumination (*prakāśa*), and that no difficulty arises from that. An illustration is offered. The statement "the father shall give the name" refers to only one name. One might object that the names given to a person in the first stage of life (*āśrama*) may be different from that given when he takes *saṃnyāsa*. There it must be admitted that the latter name is given by God.

70 (E836-837) Bhagīratha supports Vardhamāna's stand here, and expresses his own opinion. The destruction of the inherence cause has to be assumed in explaining the destruction of a thing's qualities and motions. Hence the destruction of the inherence cause must be assumed to be necessary with reference to the destruction of anything which inheres in the substance and whose destruction takes place after the destruction of its inherence cause.

(E848) Separateness is stated to be partially pervasive in two things which are said to be separated from each other.

Bhagīratha refers quite often to the views of Jayadeva, whom he calls "Miśra". Generally, he refutes the view of Jayadeva.

There are references to views held by other writers who preceded Bhagīratha. These writers are not mentioned by name. They are simply referred to as "some say".

11. DEVANĀTHA ṬHAKKURA TARKAPAÑCĀNANA (1540)

We know quite a bit about this author. His father Govinda Ṭhakkura was the author of a famous work on literature titled *Kāvyaprakāśapradīpa*, and his younger brother was Madhusūdana Ṭhakkura (author #15 below). A native of Mithilā, he is said to have written seven *Kaumudīs*, one on Mīmāṃsā, another on rhetoric, others on *smṛti*, *tantra* and *mantra* (DCB p. 189). Dineshchandra Bhattacharya provides an extensive account of his family, according to which he wrote one of his *Kaumudīs* as early as 1519, but another [the *Tantrakaumudī*] "was written at the request of Malladeva Naranārāyaṇa, who reigned (in Kuchvihara) from 1555 to 1587 A.D.", specifically in 1564-5. So Dineshchandra concludes that Devanātha was born around 1490, left Mithilā in 1526, and wrote the *Tantrakaumudī* when he was 75 years old (DCB, pp. 189-192).

11.27. DEVANĀTHA ṬHAKKURA TARKAPAÑCĀNANA, *Nyāyapariśiṣṭa* on Jayadeva's *Tattvacintāmaṇyāloka*

Manuscript copies of this work have been discovered at the Bhandarkar Oriental Research Institute and at Dinapur in Bengal. The latter was apparently transcribed at the request of the author himself in 1562 (according to UM p. 339).

12. JANAKĪNĀTHA CŪḌĀMAṆI BHAṬṬĀCĀRYA (1540)

Umesh Mishra (UM, pp. 420-421) assigns Janakīnātha to the sixteenth century. His eldest son Rāghava Pañcānana refers to his father's *Ātmatattvadīpikā* and also to Raghunātha Śiromaṇi's views, from which Mishra infers he must have lived "a little later than Śiromaṇi". The producer of the comments in NCat p. 237 refers to him as the father of Rāmabhadra Sārvabhauma, and Nārendrācārya, in the Introduction to EnInPh Bibliography's #560.4.16, and calls him the teacher of Kaṇāda Tarkavāgīśvara. Since various writers agree in dating Kaṇāda Tarkavāgīśvara around 1560--he is supposed to have been a classmate of Raghunātha Śiromaṇi--that would suggest a date of around 1540 for Janakīnātha.

12.28. JANAKĪNĀTHA CŪḌĀMAṆI BHAṬṬĀCĀRYA, *Ānvīkṣikītattvavivaraṇa* on Chapter Five of Gautama's *Nyāyasūtras*

Prabal Kumar Sen (Sen 2003, p. 5) tells us that Janakīnātha and his son Rāmabhadra Sārvabhauma collaborated in writing a commentary on the *Nyāyasūtras*. The son's commentary is on the first four chapters, while the father's commentary is on Chapter Five only. Sen's edition of the entire body of the two commentaries, he tells us in Sen 1978, pp. 1-6, was hardly possible until the discovery of a complete manuscript containing both the two commentaries.

The text of this commentary is provided by P. K. Sen: see pp. 275-382. In his footnotes (cf. the above-cited edition, pp. 701-812) Prof. Sen has provided copious illustrations of the relations between the views of this commentator and those of other commentators on the *Nyāyasūtras*, Book Five, who preceded him. The Sanskrit passages are introduced with English lead-ins.

12.29. JANAKĪNĀTHA CŪḌĀMAṆI BHAṬṬĀCĀRYA, *Nyāyasiddhāntamañjarī*

The work has been edited twice. Our "E" references are to the reprint of 1916 of the edition first printed in The Pandit n.s. 29, 1907-32, 1910. The work, or at least a part of it, was apparently translated by Tuvia Gelblum in a doctoral dissertation submitted to the University of London in 1960-61, which we have not seen.

Summary by Jitendranath Mohanty

Part One: Perception

1 (E5-7) A *pramā* is defined as *anubhava* that is *yathārtha*. *Yathārtha* is defined as the property of apprehending a character which really belongs to the object cognized.

Objection: Then doubt will be a valid awareness.

Answer: True. In the doubt "is it silver or not?" one part of the awareness--say, the silver part if the object is in fact silver--is valid awareness (*pramā*), since we experience silverness which really belongs to the object of our awareness.

Anubhava is awareness other than memory, and since it is the object of our awareness "I am experiencing (it)" (*anubhavāmi*) it has an unsublated universal property.

2 (E8-10) The causal condition *par excellence (karaṇa)* is defined as an uncommon (*asādhāraṇa*) cause (*kāraṇa*) which possesses an operation (*vyāpāra*).

Perception is defined as the causal condition *par excellence* of valid cognition which is of the nature of immediate awareness (*sākṣātkārarūpapramākāraṇam pratyakṣam*). The universal property immediate-awareness-hood is a proper universal since we have the awareness "I am directly aware (of it)".

Objection: Perception is the content of an awareness produced by the sense-organ.

Answer: No, since all awarenesses are produced by a sense-organ, viz. the internal organ.

3 (E11-17) Perception may alternatively be defined as that awareness which lacks any universal occurrent only in what is produced by a knowledge which is itself produced (*janyādhijanyamātravṛttijāti-śūnyajñānam*). Here the universals which perception lacks would be "inference-ness" etc.

The Nāstikas (i.e., Buddhists) say that immediate awareness is awareness which does not apprehend anything qualified. Thus according to them the notion of immediate awareness that, e.g., this is a pot, is an erroneous one (*bhrānti*), since its content consists of an unreal (*alīka*) pot-ness. But this Buddhist thesis is mistaken. One postulates error just when there is sublation, but in the case of pot-ness there is no sublation of it as "unreal", and its unreality is unproved.

Immediate awareness--perception--is of two kinds: eternal and non-eternal. Eternal perception is God's; everyone else's is non-eternal. Non-eternal perception is itself of two kinds: construction-free and propositional. Construction-free perception is awareness which does not apprehend a qualified

thing, or is without a qualifier (*prakāra*), since it is beyond the senses. It is grasped only by inference, on the principle that an awareness of the relatedness of things is caused only by an awareness of the relata, which awareness must happen immediately before and belongs to the same person who has the awareness of the relatedness. This principle in turn is proved by positive-and-negative concomitance.

4 (E19-22) Propositional [i.e., construction-filled] perception is an awareness which has a qualifier, which apprehends something qualified. Qualifier-ness is a kind of content-ness (*viṣayatva*), which is in turn a kind of self-linking connector which is testified to by the notion of an object's form. Others take content-ness to be a separate category.

Bhāṭṭa: Content-ness is just known-ness (*jñātatā*), which inheres in the object of awareness and is produced by a subsequent awareness.

Answer: That is not right, since even a past pot, now destroyed, may be known as having been known, but the known-ness cannot inhere in the pot, which is no more.

Another objector: Qualifier-ness is being the counterpositive of a qualification-relation that appears in an awareness (*bhāṣamānavaiśiṣṭyapratiyogitva*).

Answer: No. On that definition, in the conjunctive awareness "a stick, a person, and their contact" the stick would be the chief qualifier.

5 (E22-23) Perception is of two sorts: that which grasps a substance, and that which does not grasp a substance. The visual, tactual and internal organs are of the former kind, for they grasp substances. The olfactory, gustatory and auditory organs are of the second kind.

The internal organ, though it may have all kinds of contents, is not independent in generating awareness of external objects.

6 (E30) Objection: Inherence is not perceptible, since not all its loci are perceptible.

Answer: No, there is no such rule applicable in the case of inherence, although such a rule does hold good for contact.

7 (E35) The relation of qualifier-ness (*viśeṣaṇatva*) by which absences and inherence are grasped is said to be of two kinds: (1) qualifier-ness in virtue of a sense-organ, and (2) qualifier-ness in virtue of relationship to a sense-organ. By (1) absence of sound is perceived, since the object (sound) qualifies the organ (which is in this case *ākāśa*, the same as the auditory organ). By (2) the absence of pot on the floor, etc. are cognized. Again, (2) can be subdivided depending on the kind of relationship to a sense-organ that is in point.

8 (E41) The existence of inherence is proved by appealing to the contention that we have awarenesses of the general form "pot-ness inheres in a pot", "the cloth inheres in the threads", etc.

9 (E42) Prābhākara: There are no absences. When we have a negative judgment we just grasp a bare locus (e.g., a spot on the ground without anything on it).

Answer: No. If that were so we couldn't explain the relation between container and contained (*ādhārādheyabhāva*). Also, we would not be able to explain why, when a pot is brought to a spot on the ground which was previously devoid of it, we do not continue to say "there is no pot here"

10 (E47) The classification of absences is, as usual, into relational (*saṃsarga*) and mutual (*anyonya*) absences.

11 (E50) Absolute absences (*atyantābhāva*) are of two kinds: (1) an absence whose counterpositive-ness is limited (*avacchinna*) by a property which occurs in one thing only, and (2) an absence which is different from that. Examples of (2) are "a pot is not both pot and cloth", or "there are not two pots in a place having only one".

12 (E52) The term "*viśiṣṭābhāva*" applies to an absence where either (1) the qualifier is absent or (2) the qualificand is absent or (3) the qualification relation is absent.

13 (E52-53) Bhāṭṭa: Absences are not grasped by the sense-organs, but are ascertained by the instrument of knowledge non-perception (*anupalabdhi*).

Answer: No. To postulate an additional instrument of knowledge is less economical than to postulate a new relation. Otherwise a new instrument of knowledge could have been postulated to account for the perception of sound. And furthermore, the supposed "non-perception" cannot be the causal condition *par excellence* for grasping an absence, since it does not have an operation.

14 (E59) Mīmāṃsaka: The internal organ is not minute (*aṇu*) but all-pervasive (*vibhu*), because it is an intangible substance like the self.

Answer: If that were the case there couldn't be contact between the internal organ and the self. Contact is of two kinds: (1) contact produced by motion (*karmaja*) and (2) contact between the parts of something. If the internal organ

were all-pervasive neither it nor the self could move, and they are not the parts of anything.

Part Two: Inference

15 (E63-70) Being an inferential result (*anumititva*) is defined as either (1) the universal made known in an awareness of the form "I have inferred", or (2) the property of being an immediate awareness possessing a universal that (a) is not co-present with the property of being caused by an awareness of sound, and (b) is co-present with the property of being caused by a produced awareness. Clause (a) serves to prevent the definition over-extending to include the results of comparison and verbal testimony (*upamiti* and *śābdabodha*), while clause (b) serves to exclude the result of perception, as well as eternal construction-free awareness, from the scope of the definition.

16 (E74-75) Pervasion is defined as the property constituted by the fact that whatever belongs to the same locus as the *hetu* also belongs to the same locus as the *sādhya*. This applies both to the case of fire pervading smoke as well as to cases of only-positive inference--whatever is in the same locus as nameability also belongs to the same locus as knowability.

17 (E76-77) Cārvāka: Let that be pervasion. But it is not possible to become aware of it!

Answer: (1) Pervasion is ascertained through the absence of knowledge to the contrary. (2) Any doubt about the possibility of deviation can be removed either (a) by absence of memory of the alternatives, or (b) by the pervasion underlying a *tarka*.

18 (E81) Two accounts of the apprehension of pervasion are provided: (1) in a given instance of smoke its pervasion by fire is apprehended, but as determined by the generic character of smoke-ness, and this is remembered when the smoke is perceived on the mountain; (2) the knowledge of pervasion in a given instance also conveys knowledge of all smokes and fires through *sāmānyalakṣaṇasannikarṣa*.

19 (E82) Objection: If *sāmānyalakṣaṇasannikarṣa* were possible, then a man with closed eyes should also perceive all instances of smoke!

Answer: No. The conditions of ordinary perception of the locus of a universal constitute a necessary factor in the production of *sāmānyalakṣaṇa* perception.

20 (E85-86) The cause of an inferential knowledge

(*anumiti*) is the ascertainment of the presence of a *hetu* in a *pakṣa* as qualified by the property of being pervaded (*vyāpyatva*). Knowledge of pervasion by itself is not sufficient to produce an inferential knowledge.

21 (E92) The author seems to accept the definition of the causal condition *par excellence* as that special causal condition which has an operation (*vyāpāravad-asādhāranakaraṇa*), and so refuses to regard consideration as the causal condition *par excellence* of inferential knowledge, since consideration has no operation.

22 (E97) Doubtfulness of the *sādhya* as *sādhya* is not a necessary condition of inferential knowledge. If it were, an only-positive inference of the type "this is knowable because it is nameable" would be impossible. Inference in the absence of doubt is testified to by direct experience.

23 (E99-106) Fallacies of the *hetu* are classified into five: deviation, contradiction, counter-balance, unproved and sublated. Deviation (*savyabhicāra*) is subdivided into general, specific and inconclusive. Unproved (*asiddha*) is subdivided into *svarūpāsiddha*, *āśrayāsiddha* and *vyāpyatvāsiddha*.

24 (E117-118) Each of the members of an inference for others is sought to be defined with regard to the form of the sentence which expresses it. E.g., the thesis (*pratijñā*) is defined as that component of the argument which has a form similar to "the hill is fiery".

Part Three: Comparison

25 (E122-123) *Upamiti* (the result of comparison) is defined (a) as an instance of the universal testified to by the experience "I am aware of a comparison", or (b) as an instance of the property of being a mediate awareness which possesses a universal that is always accompanied by the property of having sound for its content. In (b) the element "which possesses a universal....content" serves to preclude the definition's over-extending to inference, while the element "a mediate awareness" serves to exclude verbal testimony.

26 (E123-124) A result of comparison invariably has sound for its content because its content is the property of being designated by a word (*padavācyatva*), which cannot be apprehended without apprehending the word concerned. A result of comparison is not, however, the same as [what is known by] verbal knowledge, for at the time of the result of comparison the word concerned is not known as having the

power to designate the thing it is about to be, through the *upamiti*, learned to designate.

27 (E125-128) A result of comparison may also arise out of knowledge of dissimilarity (*vaidharmya*). For example, a pupil asks "what is earth like?" The teacher points out the distinction of earth from water, etc. Later on, when the pupil experiences something as possessing smell and remembers what the teacher had said, he has an *upamiti* of the form "this is what is designated by the word 'earth'".

Part Four: Verbal Testimony

28 (E134-136) Verbal testimony is that which makes a universal known to us through the experience "I know through verbal testimony". Or, it may be defined as what has the property (1) of being a knowledge which does not possess a universal that invariably accompanies the property of having a word for its object, and which (2) at the same time does not possess a universal that does not pervade *anubhavatva* and that does not invariably accompany the property of being caused by words which themselves are caused. (2) serves to exclude perception, inference and memory, for those do possess the sort of universal which knowledge through verbal testimony is said to lack. (1) serves to exclude comparison.

29 (E143-147) Verbal testimony is not inference, because there is no pervasion between a word and its designatum--the former residing in *ākāśa*, the latter not. Knowledge by verbal testimony is not caused by knowledge of pervasion. It is invariably accompanied by knowledge of power (*śakti*), viz., the power of a word to designate.

30 (E144-146) Power is not a separate category. It is just convention (*saṃketa*), which is a desire of the form "let this object be understood from this word". Further, it is not the desire of any and every person, but the desire of God. Such desire is absent in the case of such noises as "abracadabra". Apprehension of power is a necessary condition of understanding, not *qua* desire of God--for then the comon man who knows not of God could not apprehend His desire and so could not understand word meanings. Apprehension of desire as mere convention is enough.

31 (E147-148) Power is first apprehended by observing the behavior of the elders, though this may be supplemented by comparison, verbal instruction, grammar and a dictionary.

32 (E150) Objection: But how, then, do the elders apprehend verbal power? If they too learn from oberving the behavior of their elders, wouldn't that lead to infinite regress?

Answer: No, since at the first creation men learn the meanings of words directly from God who himself takes on two bodies.

33 (E163-167) The Mīmāṃsā view, that the word "cow" has the power to designate cow-ness primarily and only indirectly refers to the individual cow, is rejected, and the Nyāya view established, viz., that the designative power is apprehended in relation either to what possesses cow-ness, or to the cow, but not to cow-ness (because of over-complexity). In any case, the designative power has cow-ness for its limiter, hence it manifests what possesses cow-ness.

34 (E168) Bhāṭṭa. This designative power is grasped with respect ot an object which is qualified by positive concomitance with cow-ness.

Answer: No, since the positive concomitance can be accounted for otherwise.

Prābhākara: Words designate objects only as qualified by or relation to some action.

Answer: No. It is more economical to assume that the word means the bare object, and that the reference to action is expressed, where appropriate, by some other means.

35 (E173-208) The definition of secondary meaning (*lakṣanā*) is as usual. There is no separate kind of meaning called *vyañjanā*. Secondary meaning is enough to explain all the problem cases.

36 (E280) The Prābhākara theory that every awareness apprehends both itself and its subject, viz. the self, is rejected on the ground that a visual awareness of an object arising from contact between visual organ and object cannot apprehend itself, there being no desired contact with itself (the awareness was not there prior to its origin), and cannot also apprehend the self which is not a possible object of visual perception.

37 (E282) The Bhāṭṭa theory of known-ness (*jñātatā*) is also rejected, for there is no such thing as known-ness, and also because awareness, being otherwise unknown on the Bhāṭṭa theory, cannot be legitimately held by them to be inferred. Therefore the truth is that awareness is apprehended by the internal organ. The charge of infinite regress usually raised against the theory of after-cognition (*anuvyavasāya*) is unfounded, for the series of after-cognitions may be and is in fact terminated by the emergence of some more powerful

cognitive interest.

38 (E283-284) How is the truth of an awareness apprehended? The Bhāṭṭa theory that it is apprehended by inference from known-ness cannot be inferred on its basis. If the pervasion is apprehended between known-ness and *true* awareness (i.e., knowledge) then (1) the pervasion with whose help the awareness itself is known, is not acceptable. For, if the pervasion is between known-ness and mere awareness, then truth does not hold good and (2) the *sādhya*, i.e, true awareness, is otherwise unknown.

The Prābhākara theory that truth is known by a self-illuminating awareness is not tenable, firstly because the idea of self-illumination of an awareness has just been rejected, and secondly because if an awareness were right from the beginning known to be true there could not arise any subsequent doubt as to its truth.

39 (E285-294) The contention of the school of Murāri Miśra, that the very first after-cognition is able to apprehend both that the original awareness has a certain property for its qualifier and that that same qualifier belongs to the substantive, is based on the assumption that truth can be defined as *tadviśeṣakatve sati tatprakāratvam*, whereas in fact truth is not the mere coexistence of these two properties, but requires further that the *tatprakāratva* must be limited by the *tadvadviśeṣakatva* Now this additional fact is shown to be incapable of being apprehended by the first after-cognition for various reasons.

12.30 JANAKĪNĀTHA CŪḌĀMAṆI BHAṬṬĀCĀRYA, *Marīcinibandha* on Gaṅgeśa's *Tattvacintāmaṇi*

A manuscript of the *Pratyakṣa* section of this work is said to exist. See NCat VIII, 22.

12.31 JANAKĪNĀTHA CŪḌĀMAṆI BHAṬṬĀCĀRYA. *Nibandhatātparyadīpikā* on Udayana's *Nyāyavārttikatātparyapariśuddhi*

Prabal Kumar Sen writes: "*Nibandhatātparyadīpikā*, to which he [Janakīnātha] refers in *Nyāyasiddhāntamañjarī* (Varanasi edn., p. 185), and is now lost; and which, according to Prof. D. C. Bhattacharya, was a commentary on *Nyāyanibandha*, which is another name for Udayana's *Nyāyavārttikatātparya-pariśuddhi*" (Sen 2003, pp. lxix-lxx).

13. MĀDHAVA (BHAṬṬA) (SOMAYĀJIN) (1540)

Nothing is known to us about this person.

13.32. MĀDHAVA (BHAṬṬA), *Vivaraṇa* or *Sāramañjarī* on Keśava Miśra's *Tarkabhāṣā*

Manuscript(s?) listed at NCat VIII, 121

14. MAHEṢA ṬHAKKURA (1545)

On the basis of a passage from Anambhaṭṭa's *Tattvacintāmaṇyālokasiddhāñjana*, where Annambhaṭṭa mentions four commentators on Jayadeva's work--viz., Bhagīratha Ṭhakkura, Maheṣa Ṭhakkura, Madhusūdana Ṭhakkura and Mādhava Miśra--suggesting a chronological order, we suggest placing this author at the present point in the very close chronology proposed here. Maheṣa was Bhagīratha's younger brother. Umesh Mishra (UM, pp. 356-357) gives an elaborate geneology. Dineshchandra Bhattacharya suggest he was probably born between 1500 and 1510, and wrote his *Ḍarpana* at the age of 30. Maheṣa's teacher is identified as Śucikara Paṇḍita on the authority of the teacher's grandson's reference, and it also appears he read philosophy in Varanasi with Rāmeśvara Bhaṭṭa and developed a "bias towards the Vedānta" (DCB, pp. 173-174).

Maheṣa Ṭhakkura eventually became Mahārāja of Mithilā, being given the *sanad* by Akbar through Maheṣa's pupil in 1557. He became the founder of the Darbhaṅga Rāja or *khaṇḍavalakūla* family. He appears to have written several works on Dharmaśāstra and astronomy. He died in 1569.

14.33. MAHEṢA ṬHAKKURA, *Darpaṇa* on Pakṣadhara's *Tattvacintāmaṇyāloka*

Only the *Pratyakṣa* portion of this commentary has been edited, though the work is completely available at the India Office Library in London.

15. MADHUSŪDANA ṬHAKKURA (1545)

He was the younger brother of Devanātha Ṭhakkura, seventh son of Govinda Ṭhakkura of Mithilā. Dineshchandra Bhattacharya suggests he was born around 1500 and wrote his *Kaṇṭakoddhāra* somewhere between 1525 and 1535, since a booklist dated within the decade 1540-1550 mentions the

work. This is further confirmed by the fact that Madhusūdana's mother was a daughter of a first cousin of Yajñapati Upādhyāya, who flourished around 1460 (cf. EnInPh Volume 6, author #29, pp. 473-474). Dineshchandra reports that Madhusūdana wrote a *Jīrṇoddhāra* on the *smṛti* work of Śrīdatta titled *Samayapradīpa*, as well as another commentary on Vācaspati's *Dvaitanirṇaya*. He also refers to another work of his titled *Śāradāṭīkā*. Dineshchandra considers him "(perhaps) the greatest Nyāya scholar of Mithilā in the first half of the 16th century" (DCB, pp. 176-182).

15.34. MADHUSŪDANA ṬHAKKURA, *Kaṇṭakoddhāra* on Jayadeva's *Tattvacintāmaṇyāloka*

Only the *Maṅgala* and *Prāmāṇya* sections of this commentary have been published. Dineshchandra Bhattacharya provides some remarks based on the unpublished portions, utilizing portions of the text he tracked down in various places in India from Tanjore to Darbhanga (DCB pp. 177-180). Umesh Mishra translates one or two of the unpublished portions (UM pp. 361-366).

16. DURGĀDATTA MIŚRA (1550)

Satischandra Vidyabhusana thinks that this author lived around 1550, though he offers no evidence (HIL p. 460).

16.35. DURGĀDATTA MIŚRA, *Nyāyabodhinī*

NCat 10, p. 254b gives a citation of a manuscript of this work.

17. MĀDHAVA MIŚRA (1550)

There are several Nyāya-Vaiśeṣika authors who bear this name. One was noted in EnInPh Volume 6 p. 491 (author #40). The one we are here concerned with must have antedated Annambhaṭṭa, since he is referred to in Annambhaṭṭa's *Tattvacintāmaṇyālokasiddhāñjana* (in verse five Annambhaṭṭa refers to four authors of Mithilā who names begin with "M". See also DCB p. 182-183). His father is identified as Khāntara Miśra, who seems also to have been his teacher, and belonged to the Sodarapura family of Mithilā. Dinesh Bhattacharya estimates he must have written his *Prakāśa* about 1555. One passage appears to refer to Maheśa Ṭhakkura as "unreasonable"

(*niryuktika*). This Mādhava Miśra apparently also wrote a work on *dharmaśāstra* titled *Divyadīpikā* (UM p. 366).

17.36. MĀDHAVA MIŚRA, *Prakāśa* on Jayadeva's *Tattvacintāmaṇyāloka*

Part of the *Pratyakṣa* and all of the *Anumāna* sections of this work are known to exist in manuscript form dating from 1575. There is no edition of any section at present. Umesh Mishra translates one or two passages (UM pp. 367-368). See NCat VIII, p. 42 for manuscript citations.

18. VĀMEŚVARA or VĀMADHVAJA (1550)

According to E. P. Radhakrishnan (in Poona Orientalist 4, 1939-40, pp. 170-178) this author was a pupil of Virūpanāthapada (or Virūpākṣa Śarman Kavi) Kanthābharaṇācārya, who composed a *Tattvadīpikā* in 1531 A.D. According to Radhakrishnan the teacher seems to have been a Kashmir Śaiva. On the other hand, V. Varadachari identifies our writer as an ascetic of the Pāśupata sect of Śaivism, and suggests his teacher may have been the Virūpākṣa 3who wrote the *Tattvadīpikā* on the *Devīmāhātmya* and a *Virūpākṣapañcaśatī* on the Śaivasiddhānta, and places Vāmeśvara in the first half of the 16th century.

18.37. VĀMEŚVARA, *Nibandha* on Udayana's *Nyāyakusumāñjali*

This work is available in manuscript. Consult NCat, etc.

18.38. VĀMEŚVARA, *Pañcikā* on Udayana's *Nyāyapariśiṣṭa*

"E" references are to the edition by S. N. Srirama Desikan, Tirupati 1976. Numbering of sections corresponds to the summary of the *-sūtras* in Volume 2 of this Encyclopedia.

Summarized by V. Varadachari

1 (E5) Udayana has been discussing the proper gender of the term "*sādharmyasama*". Vāmeśvara explains that if the word refers to the original reasoning, then it has masculine gender; if it refers to the rejoinder, then it is feminine; and if it refers to the refutation of the rejoinder, then it is neuter.

7 (E23) What is the difference between circular reasoning (*cakraka*) and mutual dependence (*itaretarāśraya*)?

Vāmeśvara gives examples to clarify. A case of circular reasoning is this: the *pakṣa* is established on the basis of the *hetu*, and then the *sapakṣa* is established through the *hetu* property, and then the *hetu* is established on the basis of the *sapakṣa*. A case of mutual dependence, however, is this: *sapakṣa* is established on the basis of *hetu*, and then the *hetu* is established on the basis of the *sapakṣa*.

16 (E46) "*Kāraka* and *jñāpaka hetus*...." *Kṛti* is the production of a thing (*vastunā utpāda*), *jñapti* is the awareness of a thing (*vastuno bodha*). For example, fire is a *kāraka hetu* of smoke, but smoke is a *jñāpaka hetu* of fire.

19 (E62) The difference between a sublater (*bādhaka*) and a counteracter (*pratirodhaka*) is that the former refutes what has been accepted as being the more powerful reason, while the latter refutes what has been accepted as being of equal power to others.

21 (E70-71) Quibbling has three kinds: (1) *vākchala*, where the primary meaning is undermined, (2) *upacārachala*, where the secondary or figurative meaning is undermined, and (3) *sāmāyachala*, where the intention is undermined.

19. KṚṢṆAMIŚRA or KṚṢṆADEVA (1550)

According to Muni Jinavijaya, the editor of the only edition of the *Padārthamañjūṣā* (see below), the work was written when King Ārjuna, son of Śārṅgadhārin, was the ruler. He was a devotee of Reṇuka, who was his patron. His preceptor's name was Rāma. Mañcīśa was his Mīmāṃsā teacher. For more information one may consult K. M. K. Sarma, Adyar Library Bulletin 7.4, 1943, 269-271...

19.39. KṚṢṆAMIŚRA, *Padārthamañjūṣā*

The work is written in the form of verses numbering 321 grouped into eight sections, the first seven devoted to each one of the seven Vaiśeṣika categories and the last to liberation. A numbered reference is to the number of the verse. The edition of the work, by Muni Jinavijaya by Muni Jinavijaya, Rajasthan Puratana Granthamala 38 (Jodhpur 1963) was unavailable to us.

Summary by V. Varadachari

23a. The author admits variegated color, taste and

touch.

61. The monistic doctrine of ignorance is rejected.

65b-66a. Darkness may be the taken as absence of light or the color of earth.[1]

Contact is stated to be of three kinds, namely: that which takes place between the internal organ and the self; that which connects the component parts of a whole substance; and that which gives rise to striking (*ghāta*) and pushing (*nodana*).[2]

133. Inference is the knowledge produced by invariable connection. It is of two kinds, *dṛṣṭa* and *sāmānyatodṛṣṭa*.

145-158a. *Tarka* is said to be of eleven kinds: *vyāghāta, ātmāśraya, anyonyāśraya, cakraka, asthiti (anavasthā), pratibandhin, kalpanālāghava, kalpanāgaurava, utsarga, apavāda* and *vaiyārthya*. They are illustrated.

185-191. Verbal testimony is included within inference, and comparison within perception. Presumption and probability are included within inference. Non-apprehension and tradition come under perception and verbal testimony respectively.

214. Impetus is said to be of two kinds: that which is produced by action, and that in water which brings about the division of substances.

219b-221. The concept of *apūrva*, as held by Kumārila, is rejected.

225. Pāṇini is said to have preached the *sphoṭa* theory.

254b-257a. The Buddhists' *apohavāda* is treated and refuted.

257a. The grammarian Vyāḍi held the universal is the sense of a word.

285-287b. Inherence is known through inference.

297-309. The concepts of liberation held by several other schools of thought are stated and rejected. The Vaiśeṣika view is then stated.

310-313. A man who has acquired discrimination of right from wrong takes not the defects in the objects in the world. He then gets detachment. By abandoning what is prohibited and taking to the permanent, he will arrive at

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[1] The latter view is akin to but not identical with the theory of the Prābhākaras, who take darkness to be a portion of earth where light is precluded.

[2] This is not the traditional view of the Vaiśeṣikas.

inaction, which as it increases will lead to the attainment of knowledge. The nine qualities of the self will then become extinct. A condition like fire which has consumed the fuel will then be attained, and that is called liberation. One's whole series of miseries is completely destroyed.

20. CANDĪŚVARA (1550)

NCat 6, p. 302 identifies him as a pupil of Mādhava Sarasvatī.

20.40. CANDĪŚVARA, *Nyāyabodhinī*

NCat 6, p. 302 gives Hall, p. 156 for a manuscript reference.

21. KAṆĀDA TARKAVĀGĪŚA (1560)

This Bengali author is said to have been a pupil of Vāsudeva Sārvabhauma and a classmate of Raghunātha Śiromaṇi. He is also held to have been a pupil of Janakīnātha Cuḍāmaṇi Bhaṭṭācārya. If all of those things are true, our author cannot have lived much later than 1560.

Anantalal Thakur (ODVS pp. 337-338) gives a lot of information about Kaṇāda Tārkavāgīśa. "He was an inhabitant of Khānakūl (in Krishnanagar) and his descendants were still living....in 1952....(T)here is no doubt that Janakīnātha was the preceptor of Kaṇāda. In *Bhāṣaratna* Kaṇāda mentions his other work named *Tarkavādārthamañjarī* but the work is long lost. The time of his career as an author may fairly be taken as A. D. 1510-25. So, the hearsay that Kaṇāda was the classmate of Raghunātha Śiromani is not totally baseless. In the *Tattvacintāmaniṭīkā* Kaṇāda quotes a number of Dīdhitikāra's (i.e. Raghunātha's) passages."

21.41. KAṆĀDA TARKAVĀGĪŚA, *Bhāṣāratna*

"E" references are to Kalipada Tarkacarya's edition, Sanskrit Sahitya Parishad Series 20, 1935.

Anantalal Thakur (ODVS pp. 337-338) provides some comments giving details concerning this work.

Summary by V. Varadachari

(E13) Smell is classified into two kinds. One is produced from smell, and the other by internal heat (*pāka*).

(E19) Water-ness (*jalatva*) is perceptible in all products from the *truṭi* and larger, and it is not perceptible below that level.

(E41) God is admitted by the Vaiśeṣika school to have eight qualities, namely number, size, separateness, contact, disjunction, awareness, desire and volition. The author of the *Dīdhiti* (Udayana) admits eternal satisfaction also as God's quality, thus recognizing nine qualities of God.

(E46) There are only two kinds of size: atomic and large.

(E47) Contact and disjunction are only of two kinds: (1) produced by action in both cases, (2) contact produced by contact and disjunction produced by disjunction.

Knowledge, volition and desire are either eternal or non-eternal. The former kind belongs to God, the latter to man. Aversion (*dveṣa*) is of only the latter kind.

(E49) While the old school admitted that enumerative cognition (*apekṣābuddhi*) lasts for three moments and ceases in the fourth, Raghunātha Śiromaṇi held that it gets destroyed in the third moment of its existence. He held that perceptual awareness of two (*dvitva*) is an extraordinary perception.

(E71-72) The instrumental cause is defined as that which is a cause attended with intermediary function. It is held to be of two kinds. One sort helps in bringing about the result for which the causes are brought into operation; the other has the nature of determining itself as the instrumental cause. Śivāditya Miśra is stated to have treated the instrumental cause as an *akhaṇḍopādhi*.

(E92) Contact of the eye with daylight is the cause of ocular perception of a substance.

(E131) Chief-qualifier-ness (*prakāratā*) is identified as a particular kind of content-ness (*viṣayatā*). This means that chief-qualifier-ness determines the way in which a content is apprehended. Content-ness is of four kinds. The first kind relates to construction-free perception. The second kind relates to the content-ness residing in pot-ness in the awareness of a pot. The third kind is related to qualificand-ness (*viśeṣyatā*). The fourth kind is called "relational" (*sāṃsargikī*), that is, the relation between the content and its universal property. All these four are kinds of self-linking connectors.

21.42. KAṆĀDA TARKAVĀGĪŚA, *Vyākhyā* on Gaṅgeśa's *Tattvacintāmaṇi*

See NCat 3, p. 126 for manuscript citations.

21.43. KAṆĀDA TARKAVĀGĪŚA, *Apaśabdakhaṇḍana*
See NCat 3, p. 126 for manuscript citations.

21.44. KAṆĀDA TARKAVĀGĪŚA, *Vāyuvāda*
NCat 3, p. 126 cites a manuscript.

22. (VĀCAKA) GUṆARATNA (1570)

Nagin Shah, in the Introduction to his edition of this author's *Sukhabodhikā-Tippanikā* on Gaṅgeśa's *Tattvacintāmaṇi*, Sections *Upādhi* to *Bādha* (B.L.Series #17, Delhi 2005), argues for the date given above for this author and for the ascription to him of the two works listed below as his works, as well as arguing against his authorship of several others. He identifies this Guṇaratna as the author of the two works listed, and gives arguments (p. xi) to substantiate this. This Guṇaratna, Shah claims, is the same as the pupil of Jinamāṇikyasūri of the Jain Kharatara Gaccha who is the author of the *Sāradīpikā* (in 10,500 *ślokas*), a commentary on the *Kāvyaprakāśa*, written in 1553 A.D.

22.45. (VĀCAKA) GUṆARATNA, *Tarkataraṅgiṇī* on Govardhana's (?) *Tarkabhāṣāprakāśa*

J. S. Jetly, writing in the Journal of the Oriental Institute 8, 1959, pp. 323-345, identifies the author of this work with the author of the *Śaśadharaṭippaṇī.* Nagin Shah, in the work cited in the previous paragraph (pp. xiii-xv), controverts this identification, citing Bimal Matilal , although he disagrees with Matilal concerning the identification and dating of the author of the *Śaśadharaṭippaṇī*. Shah deems himself not able to definitely date or otherwise identify that previous Guṇaratna.

22.46. (VĀCAKA) GUṆARATNA, *Sukhabodhikā-Tippanikā* on Gaṅgeśa's *Tattvacintāmaṇi, Upādhi* to *Bādha* sections

In the introduction to his edition cited two paragraphs above, Nagin Shah comments: "*Sukhabodhikā Tippanikā* is not merely an annotation-type commentary, as its title suggests. It is a good expository commentary....It expounds subtle points of Navya-Nyāya. At times, it draws fine line of distinction between cognate or closely related concepts of term....Sometimes it clearly points out who are intended by such terms as *ācāryāḥ, prācam*, etc. It clarifies that there *prācam* stands for Vācaspatimiśra. It refers to and quotes from authoritative texts and authors like Vātsyāyana, Vācaspati Miśra, Udayana, *Kusumāñjaliprakāśa, Līlāvatī,* Gaṅgeśa, Yajñapati Upādhyāya, Pakṣadhara Miśra, Bhāskara, etc. It ably discusses some grammatical points and there in support of his exposition quotes Pāṇini, Mahābhāṣyakāra Patañjali and Nyāsakāra....The commentary raises doubts and then answers them lucidly and convincingly. This is its main feature...."

23. RĀMAKṚṢṆA BHAṬṬĀCĀRYA CAKRAVARTIN (1570)

A pupil of Raghunātha Śiromaṇi. Daniel H. H. Ingalls tells us "In his time Rāmakṛṣṇa was regarded as one of the leading Naiyāyikas of India. Abū 'l Fazl's *Āīn-i-Akbarī* contains a list of the learned men of Akbar's time. These learned men are divided into five categories, of which the fourth comprises names of men 'who look upon testimony as something filled with the dust of suspicion and handle nothing without proof'. Actually, the Hindu members of the fourth category, twice as numerous as the Muslims, are all Naiyāyikas. Rāmakṛṣṇa is one of the 15 Hindus listed. D. C. Bhattacharyya...states that the learned men mentioned in these lists 'mostly flourished early in the reign of Akbar.' Accordingly, we may suppose that Rāmakṛṣṇa was famous in the 1560s and 1570s." (Ingalls pp. 16-17) The article that Ingalls draws from is D. C. Bhattacharyya, "Sanskrit scholars of Akbar's time", Indian Historical Quarterly 13, 1937, pp. 31-36.)

Since the secondary literature is full of quite different estimates of the time and lineage of an author by this name, we should here provide Ingalls' firmest evidence for the identity of this author. "In the introductory verses Rāmakṛṣṇa clearly states that his teacher was Śiromaṇi" (Ingalls p. 16, who quotes the verse as follows:

"...*tasāṇayam guṇa-vivecanam ākalayya*
brute Śiromaṇi-guror iha Rāmakṛṣṇa.",

citing the India Office Catalogue of Eggeling and Keith, No. 2068). Ingalls adds: "Since there is a MS. of one of our Rāmakṛṣṇa's works copied in A. D. 1603 (see *Cat.I.O.*, No. 2069), and since....he was famous long before this, he cannot have had a great-grandson writing books in the nineteenth century."

Ingalls identifies the works we list below as being from

this Rāmakṛṣṇa's pen. Two other works identified by some as written by our author, a *Nyāyadīpikā* and a *Tarkāmṛta*, are argued by Ingalls (Ingalls, footnote 67 on p. 16) not to have been this author's creations.

23.47. RĀMAKṚṢṆA BHAṬṬĀCĀRYA CAKRAVARTIN, *Darpaṇa* on Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

Ingalls (ibid.) refers us to Aufrecht's *Catalogus Catalogorum*, Pt. III, as authority for this ascription.

23.48. RĀMAKṚṢṆA BHAṬṬĀCĀRYA CAKRAVARTIN, Commentary on Raghunātha Śiromaṇi's *Kiraṇāvalīprakāśadīdhiti*

Manuscripts of the *Guṇa* section of this are cited in NCat 4, p. 155.

23.49. RĀMAKṚṢṆA BHAṬṬĀCĀRYA CAKRAVARTIN, Commentary on Raghunātha Śiromaṇi's *Ākhyātavāda*

Ingalls (ibid., note 66) cites "*Cat. Tanjore*, No. 6599". References in NCat II, p. 10 under "Rāmakṛṣṇa" may be to this work.

23.50. RĀMAKṚṢṆA BHAṬṬĀCĀRYA CAKRAVARTIN, *Viveka* on Raghunātha Śiromaṇi's *Nañvāda*

Ingalls (ibid.) cites "*Cat. Tanjore*, No. 6599". See NCat 9, p. 324 for other citations.

23.51. RĀMAKṚṢṆA BHAṬṬĀCĀRYA CAKRAVARTIN, *Prakāśa* on Vallabha's *Nyāyalīlāvatī*

See ODVS p. 322 for manuscript citations. Thakur suggests Rāmakṛṣṇa may have written two such commentaries.

24. RĀJACŪḌĀMAṆI DĪKṢITA (1570)

Umesh Mishra (UM, p. 473) informs us that Rājacūḍāmaṇi Dīkṣita was a minister of the court of Raghunātha Nāyaka of Tanjore, NCat VIII, 24 reports that his father's name was Ratnakheṭa Śrīnivāsa Dīkṣita. According to Ganganatha Jha (Jha/Mishra p. 6) he lost his parents very early and was brought up by his brother Ardhanārīśvara Dīkṣita. He was a pupil of Veṅkateśvara Dīkṣita. He says that his *Tantraśikhāmaṇi* on the *Mīmāṃsāsūtras* was written in 1559 (*śaka* 1636). Besides the Nyāya works listed below, Jha ascribes

to him a *Nāṭīkamalanīkalahaṃsa*, a commentary *Karpuravārttika* on Pārthasārathi Miśra's *Śāstradīpikā*, and a *Nyāyamuktāvalī* on the *Sankarṣakāṇḍa*. NCat VIII, 92 also lists a Bhāṭṭa work titled *Tantraratnākara* or *Tantrasāra*. Professor Varadachari knows of several works by this author on topics other than philosophy.

24.52. RĀJACŪḌĀMAṆI DĪKṢITA, *Darpana* on Gaṅgeśa's *Tattvacintāmaṇi*

Only the *Śabda* section of this work has been published. It is summarized below. "E" references are to the edition by T. Ganapati Sastri in Trivandrum Sanskrit Series 34, 1913. NCat VIII, 24, 39 tells us that the *Pratyakṣa* portion is available in manuscript form.

Summary by V. Varadachari

BOOK FOUR: *Śabda*

1. *Saṃgati*

(E1-2) The connection between comparison (the topic of the previous Book III) and language or verbal testimony (*śabda*, the topic of this Book) is stated to be the relation between something that depends and that depended upon, which explains the order in which these two topics are taken up. Comparison is the cause, as it is depended upon. Verbal testimony is the effect, being dependent on comparison. Verbal testimony requires knowledge of the denotative power of words in order to give rise to the awareness of the meaning of a sentence. Knowledge of that denotative power arises through comparison. So comparison is thus proved to be of assistance for verbal testimony through indicating the denotative power.

2. *Śabdasvātantrya*

(E2-12) Verbal testimony is defined as consisting in the universal sound-ness while being produced by knowledge of the real nature of the sense of the sentence being employed. Here is how the definition applies: The use of the sentence "bring the cow" is due to the awareness of the sense of a sentence with that form. The words "bring the cow" are used because of this awareness. On the principle underlying this, the words are employed after knowing their meaning. The definition thus over-extends to cover a sentence like "sprinkle with fire", which is produced by knowledge of the sense of the words. To avoid

this result, the expression "knowledge of the real nature of the sense of the sentence" is provided in the definition.

3. Expectancy (*ākāṅkṣā*)

(E13-16) While treating expectancy it is shown that only those sentences which are known as having expectancy, congruity, etc. give rise to knowledge of the sense of a sentence. Knowledge of expectancy is thus an auxiliary cause for verbal knowledge. When a particular word does not give rise by itself to knowledge of the syntactical relation, that word fails to produce understanding of the sentence meaning. This is expectancy. For instance, the word "*gām*" in the sentence "*gām ānaya*" does not provide any syntactical understanding without the word "*ānaya*", and thus there is expectancy for the word "*gām*" to be followed by "*ānaya*".

4. Fitness (*yogyatā*)

(E16-20) Semantic fitness is stated to be the sense of a sentence relating to the syntactical relation between words. Fitness is not by its form the cause of verbal awareness, but only by being known. Thus the knowledge of fitness is found in both doubt and ascertainment. That is why erroneous verbal awareness arises from erroneous supposition of fitness, as in the case of "sprinkle with fire." This is the view of the old Naiyāyikas.

Then Gaṅgeśa's view is set forth. Fitness is stated to be the absence of knowledge which is qualified by the mode of the counterpositive of an absolute absence residing in the sense of another word when it is related to the sense of a particular word. For instance, in the sentence "bring the jar" the word "jar" means that a jar is the object. The relation with this lies in its being brought, which is the sense of another word. The absolute absence which rests in bringing, which is the sense of another word, is not the absolute absence of any relation of the jar which is the object, but rather the absence of relation to this house. Correct awareness of the mode of its counterpositive is the contact with the house being the object, and this is the counterpositive of the absolute absence relating to bringing. Here contact with the house, being the object, is qualified by it. What is not qualified by it lies in the relation of the jar being the object. Thus the definition becomes applicable.

5. Contiguity (*āsattii*)

(E20-22) "....which are connected with each other....", i.e., when the previous words are remembered. Thus memory of contiguity is the cause of linguistic understanding by its very existence, not through its being known. "....Without a long pause between them...." indicates that the appropriate awareness does not arise when there is a break between the words. E.g., "the hill is eaten and is having fire by Devadatta." Here proximity of the hill and possession of fire are separated by the presence of the meaning of the word "eaten". So the senses of the words that are fit to be related are not brought together without a break: as a result there is no linguistic understanding.

Objection: The recollection of the senses of the preceding words is destroyed by the recollection of the sense of the succeeding word. Therefore, the senses of the words are not recollected at one and the same time. How then can contiguity form part of the knowledge of the relation between words?

Answer: Words are recalled together at the same time through the traces produced by the experiences of the various words which form parts of the sentence. Then arises the recollection of the senses of those words which form into a group and linguistic understanding is said to arise from this. That is, there rises at first the recollection of the meaning of each word separately, and then there arises the recollection of the sense of all these words as a group. Then understanding arises.

6. *Śabdādhyāhāra*

(E22-24) Prābhākara: Linguistic understanding need not necessarily be admitted as arising only when the word's meaning becomes recognized. When only the word "*pidhāna*" is spoken in an appropriate context where the idea of an entrance or door is required, even though one remembers what that word means from another context, still its memory is the cause of linguistic understanding. Memory of the sense of a word need not be admitted as arising from those words.

Answer: No. One guesses the meaning of the problematic word from his understanding of the meaning(s) of the unproblematic one(s) uttered in the context.

7. Speaker's intention (*tātparya*)

(E24-25) The intention of the speaker can also be a

cause of linguistic understanding.

24.53. RĀJACŪḌĀMAṆI DĪKṢITA *Prakāśa* on Janakīnātha's *Nyāyasiddhāntamañjarī* or *-dīpa*

A manuscript of this is cited at NCat X, 271

25. KṚṢṆADĀSA SĀRVABHAUMA BHAṬṬĀCĀRYA (1570)

A prolific writer, and apparently the proper author of one of the great modern handbooks on Nyāya, Kṛṣṇadāsa Sārvabhauma appears to have flourished around 1575. (A manuscript of work #25.56 exists dating from 1602, according to Vidyabhusana (HIL p. 468.) He was the teacher of Bhavānanda Siddhāntavāgīśa, who seems to date from the beginning of the 17th century.

Umesh Mishra (UM p. 422) has argued for a remarkable fact, that this writer is the author of the *Bhāṣāpariccheda* with its commentary *Siddhāntamuktāvalī*, commonly held to have been composed by Viśvanātha Nyāyapañcānana. He reports, citing D. C. Bhattacharya's VNNC, pp. 117-120, that Bhattacharya "has collected several old manuscripts of the two works and has found in them the name of Mm. Kṛṣṇadāsa as their author." He also has determined that a commentary on those works called *Ullāsa* was written by one Viśvanātha before 1611, since a manuscript of that date exists in the Bhandarkar Oriental Research Institute Library. This Viśvanātha need not be the same as [our #55] Viśvanātha Nyāyapañcānana, whose date we estimate as ca. 1635. Thakur, ODVS pp. 339-340, reviews these arguments

On the other hand, Ashok Kumar Goswami in his Introduction to *A Critique on Śabda* (Sri Garib Dass Oriental Series No. 112. Delhi: Sri Satguru Publications, 1991), pp. 12-15, has reviewed the arguments of D. C. Bhattacharya and finds reason to doubt each one of them, concluding on p. 15 "pending discovery of stronger evidences, we may conclude that there is no point in doubting Viśvanāthanyāyapañcānana as the author of the *Bhaṣapāriccheda*". He dismisses the dating [1611] of the *Ullāsa* manuscript as unproved, and views the other points in Bhattacharya's arguments as coincidences, ascribing the dating as due to an odd feature of Maithili language in which the word "*śaka*" has "the sense of '*saṃvat*' (a year in general)."

We prefer here to follow Bhattacharya's dating, for

reasons which will be presented subsequently on pp. 308-309.

25.54. KṚṢṆADĀSA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Prasāriṇī* on Jayadeva's *Tattvacintāmaṇyāloka*

Dinesh Chandra Bhattacharya (DCB p. 154) states that he has "recently" (1958) discovered a manuscript of this work. R. Thangaswami Sarma reports manuscripts of the work at Tanjore and in Kashmir (DM p. 52).

25.55. KṚṢṆADĀSA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Prasāriṇī* on Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

The *Anumāna* section has been edited in Bibliotheca Indica 196 and 203. Manuscripts of the portion of this commentary on *Ākhyāta* are extant at the India Office Library, London and at the Tanjore Sarasvati Mahal Library (UM p. 421).

25.56. KṚṢṆADĀSA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Ṭippaṇī* on Raghunātha Śiromaṇi's *Nañvāda*

A manuscript of this work was noted in Stein's Catalogue of the Jammu-Kashmir Raghunatha Mandira.

25.57. KṚṢṆADĀSA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Ṭīkā* on Udayana's *Nyāyakusumāñjali*

Umesh Mishra (UM, pp. 421-422) cites a manuscript of this work in the Saraswati Bhavan in Banaras.

25.58. KṚṢṆADĀSA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Ṭīkā* on Raghunātha Śiromaṇi's *Guṇakiraṇāvalīprakāśadīdhitiṭīkā*

Noted by Umesh Mishra as referred to in the manuscript previously cited at the Saraswati Bhavan.

25.59. KṚṢṆADĀSA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Bhāṣāpariccheda* with *Siddhāntamuktāvalī* thereon

This extremely popular work, regularly attributed to Viśvanātha Nyāyasiddhānta Pañcānana, is used widely to introduce budding *paṇḍitas* to the details of the Nyāya-Vaiśeṣika system. It has been frequently printed, but, surprisingly, translated in its entirety only once, by Madhavananda in 1940, which is our "T". Our "E" is the edition in Kashi Sanskrit Series 6, reprinted 1951.

Summary by Karl H. Potter

1 (BhP 1a) (E1-5; T1-4) On the Invocation (*maṅgalavāda*) Several verses of invocation are offered in order to remove obstacles.

Objection: An invocation causes neither the removal of obstacles nor the attainment of completion of the work, since we find unobstructed completion of works written by heterodox (*nāstika*) authors.

Answer: Since the invocation is an accepted custom it must have some result. It is wrong to postulate an unseen (*adṛśya*) result where a seen result is possible, and since the completion of the work is in the author's mind, one must assume that its completion is the result in question. Now if no invocation is found offered one must assume it was offered in a previous life. And where an invocation is offered but the result is not accomplished one presumes that there were obstacles too strong for this invocation to overcome. This is the view of the old school of Naiyāyikas.

The new school, however, maintains that the result of an invocation is the removal of obstacles, and completion of the work the result of a variety of causal conditions including the intelligence and talent of its author, etc. Now in the case of books completed by heterodox writers their success is either due to invocations made in previous births, or to the fact that there weren't any obstacles to be overcome as a matter of natural fact.

2 (BhP 1b) (E17-29; T4-5) Proof of God's Existence. Just as effects such as jars, etc. require production by an agent, so earth, sprouts, etc. require a maker. This maker cannot be people like you and me; thus God is proved as their maker.

Objection: This argument commits the fallacy of counter-balanced, since there is the counter-balancing argument "the earth has no maker, because it is not produced by a maker who has a body."

Answer: No, since there is no corroboration (for such an argument), whereas there is corroboration for my argument, as well as supporting Vedic texts (which are quoted).

3 (BhP 2) (E30-45; T6-7) The Categories. The usual seven categories are listed. Candidates such as power (*śakti*) and similarity (*sādṛśya*) are shown to be unnecessary or included in one of the other already listed.

4 (BhP 3-5) (E46-52; T8-10) The substances and qualities are enumerated.

Objection: Where is the proof of a (proper) universal substance-ness? Perception cannot prove it, since it is not seen in (substances like) ghee, lac, etc.

Answer: Substance-ness is proved to be that universal property which limits the inherence-cause-ness to an effect, or as the limiter of the inherence-cause-ness relative to contact or disjunction.

Objection: Why isn't darkness a tenth substance?

Answer: Darkness can be accounted for as absence of light.

5 (BhP 6-7) (E53-55; T10) Motions are divided into the usual five, and various other kinds of motion classed under the fifth kind.

6 (BhP 8-10a) (E55-62; T11-13) The definition of a universal property (*sāmānya*) is that it is an eternal entity which inheres in many things. A property which does not inhere in many things is not a universal (*jāti*). The six impediments to universalhood are listed.

There are two kinds of universals, higher and lower. The higher kind is existence (*sattā*), since it is more pervasive (*vyāpaka*) than lower universals such as substance-hood, which are pervaded (*vyāpya*).

7 (BhP 11) (E65-68; T13-16) Inherence relates wholes to their parts, universals to their particular instances, qualities and motions to their substantive loci, and individuators to the eternal substances that they individuate. Inherence is eternal. The proof of inherence is as follows: An awareness of a qualified thing always involves awareness of three more things--a qualificand (*viśeṣya*), a qualifier (*viśeṣaṇa*), and a relation between the two, as in, e.g., "the man holds a stick". Now in the awareness that a substance possesses a quality the relation cannot be contact, so we must postulate a relation to connect the two. That relation is inherence.

Objection: This relation is just a self-linking connector (*svarūpasambandha*), so the proof only proves what is already admitted, or else it mistakenly proves something else than is intended.

Answer: To assume an indefinite number of self-linking connectors is cumbrous. Thus inherence, which is one, is postulated for the sake of simplicity.

Objection: Inherence cannot be one, because then there will result the cognition that air has color!

Answer: No, since although there is inherence-of-color in air there is no color in air.

Objection: Then qualification (*vaiśiṣṭya*) of an absence would be a relation distinct from the locus of the absence.

Answer: No. Either this distinct relation is one or it is not. If it were single, then even when a jar has been brought to a spot we would still cognize its absence there, it being eternally there (for it will not be perceived elsewhere if it is not perceived there where it actually is). If on the other hand there are many such qualification-relations an infinite number of such relations will have to be postulated, and this is heavy. So the relation in question is just the locus itself as associated with the specific time in question.

9 (BhP 12-13) (E69-75; T16-19) Absences are of two kinds: relational and mutual. The relational kind has three varieties: prior absence, posterior absence and absolute absence. Absolute absence is eternal. Now when a pot on the ground is taken away and then returned to the spot, even though there is absolute absence of pot there while the pot is, we do not have an awareness of the absence while the pot is there, because it is not absent at that time. Others, however, wish to postulate for this case a fourth kind of absence which has a beginning and an end.

The old Naiyāyikas say that absolute absence does not reside in the locus of a prior or a posterior absence. The new school, however, says that absolute absence is present throughout.

Objection: Why not, for simplicity's sake, say that an absence is just its locus?

Answer: No. It is simpler to postulate an additional kind of absence then to assume the identity of absences with an infinite number of loci. Anyway, in ordinary language we say "there is absence of pot on the ground," making the absence an attribute of the ground, not identical with it. Furthermore, it explains why we can perceive absences of sounds, smells, tastes, etc. in substances, for if those absences were identical with their loci they would be imperceptible, as the organs of hearing, smelling and tasting do not grasp substances. The same reasoning demonstrates that an absence cannot be equated with some particular sort of awareness--if so, it would be imperceptible.

10 (BhP 13) (E75-78; T129) Knowable-ness is a common feature of all members of the categories, since at least God is aware of everything. Nameable-ness and being a content of awareness are other features common to all things.

11 (BhP 14) (E76-78; T19-21) The first five categories comprise positive entities (*bhāva*); they are many and are relata of inherence. The first three categories have existence (*sattā*). The six categories excluding substance lack qualities and motions.

Objection: A pot at its first moment of origination has neither quality nor motion.

Answer: More precisely, "lacking qualities and motions" must be understood to mean "having attributes that are lacking in things possessing qualities and having imposted properties which differentiate categories from one another, which properties are absent in things possessing motion". The pot in its first moment satisfies this expanded definition.

12 (BhP 15) (E78-80; T21-23) The size of an atom (*pārimaṇḍalya*) is not a cause of anything. If it were a cause, it would be the cause of the size of the dyad formed by the atoms in which atomic size resides, but that is not possible, since there is the rule that a size produces a more intense size of that kind; thus if atomic size could cause a size that size would be smaller than its cause!

(Objection: But atomic size must be the cause in yogic perception of atoms.

(Answer:) In yogic perception the objects of the perception are not the causes of that perception.

In introspection of the self the all-pervading size of the self is one of the causes of its perception. Likewise, therefore, *ākāśa* should be held to have this same all-pervading size. Some say that Udayana held that all-pervading size (like atomic size) is not a cause, but they are wrong, for when (in *Kiraṇāvalī*) Udayana speaks of the non-causality of things he is not considering causality with respect to awarenesses.

16 (E80; T23) Causality is defined as that invariable precedence which is free from *anyathāsiddhi*.

18 (E81-85; T24-26) The inherence, non-inherence and instrumental types of cause are defined.

19 (E86-91; T26-30) The types of *anyathāsiddhi* are listed as five where x is the cause of y: (1) x-ness is *anyathāsiddha* to y's production--e.g., stick-ness is superfluous in producing a jar; (2) anything whose concomitance with y is known only through its relation to x, e.g., the color of the stick, is *anyathāsiddha;* (3) anything whose precedence to y is known

only because of its precedence to something else *z* is *anyathāsiddha*--e.g., *ākāśa* is known to precede the pot only because it is the inherence cause of sound (and not directly); (4) if something is known to precede *y* only insofar as it is known to precede *x* it is *anyathāsiddha*; (5) anything which is precedent but is not a necessary condition (*āvaśyakl̥ptaniyatapūrvavartin*) is *anyathāsiddha*--e.g., the limiter of the cause of perception is medium-sized-ness (*mahattva*) and not being composite (*anekadravyatva*), since it is simpler to regard medium-sized-ness as a limiter of the causality. Or, another example is a donkey, since donkeys do not always wander by when a pot is produced, although in a particular case one might do so.

23-26 (E92-101; T30-34) The similarities and differences among the substances are now indicated.

27 (E97-101; T34-36) The specific qualities (*viśeṣaguṇa*) of *ākāśa* and selves are "transitory", i.e., they last only two moments and are destroyed at the third.

Objection: Color and other qualities also may last for only two moments, so the definition of transitory specific qualities is too wide.

Answer: No, for the idea is that it is just those qualities which have that universal which does not reside in products lasting four moments. An enumerative cognition lasts for three moments, but no awareness which is produced lasts for four moments. God's knowledge lasts four moments, but it is not a product.

28 (E101;T36-38) Earth, water and fire have color and liquidity and are perceptible.

Objection: What proof is there that the visual organ, the fire in a frying pan, or hot air have color?

Answer: We can infer it from their heat.

Objection: Earthen pots are not liquid.

Answer: But to possess liquidity means to possess the universal properties which are pervaded by substance-hood occurring in things possessing liquidity.

35 (E104-109; T40-42) Earth is defined as the cause of smell and has many colors.

Objection: Stones have no smell.

Answer: We infer they do, since they are substances.

Objection: Then why don't we perceive a stone's smell?

Answer: Because it is not strong enough. But when a stone is reduced to ashes it smells, which proves that stones smell.

Earth has six kinds of taste and two kinds of smell.

37 (E112-116; T43-45) Objection: What is the proof of (a single) whole? Why can't it be explained as just a heap of atoms?

Answer: No. Since an atom is imperceptible, a heap of them must be so too.

Objector: Even though a single atom is imperceptible, a collection of them is perceptible, just as a single hair is invisible at a distance but a bunch of hairs are visible.

Answer: The analogy won't do, since the single hair *is* perceptible close up.

Objection: But surely we do see a heap of atoms when we see a jar!

Answer: The rule is that an invisible thing cannot be the material of a visible thing; otherwise the visual organ should be perceptible.

Objection: But the *minimum perceptibilium* is produced from invisible dyads; thus the "rule" is no rule.

Answer: A thing is visible when middle-size and manifested-color are present, and not otherwise; the *minimum perceptibilium* has middle-size, and the dyad doesn't. But you also agree with us that the atom is imperceptible, since they are not middle-sized. Wholes are therefore proved to exist. They are non-eternal, since they are produced and destroyed.

(How is it proved that atoms exist?) If all wholes have an infinite series of parts then Mt. Meru and a mustard seed would be equal in size. So the series of parts must stop somewhere, have a limit. If that limit itself be non-eternal, then (since a non-eternal thing is produced from its parts) it would be produced without an inherent cause, which is impossible. Therefore the limit is an eternal substance. And just as the degrees of middle-sized-ness have their smallest limit, so the degrees of small size must have their smallest limit, which is atomic size.

Objection: The series can stop with the *minimum perceptibilium*.

Answer: No, for the following reason. The *minimum perceptibilium* has parts, because it is a visible substance, like a jar. Furthermore, the parts of a *minimum perceptibilium* themselves have parts, since they produce something of middle size, like the halves of a jar.

Objection: Then the parts of a dyad (viz. the atoms)

must themselves have parts!

Answer: No, for that produces an infinite regress.

38 (E117-122; T45-49) Being a body (*śarīratva*) is not a proper universal, since that would produce cross-connection of that universal with earth-hood, etc. Being a body is being the locus of effort. Trees, etc. also have efforts, and the definition includes them.

Objector: What is the proof that trees are bodies?

Answer: That they possess bodily air (*adhyātmikavāyu*).

Objection: And what is the proof of that?

Answer: Because their limbs sprout again after having been broken.

A content (*viṣaya*) is defined as whatever is instrumental for experiencing (*upabhogasādhana*). Every effect is the result of *adṛṣṭa*, and so cannot help but contribute, either directly or indirectly, to a person's experiencing. Thus everything from the dyad to the whole universe is a content.

39 (E123-128; T49-52) Water has white color, sweet taste, cold touch, visicidity, and its liquidity is natural.

Objection: Why does water have only white color, since we see that the color of the Jamuna river is blue?

Answer: Earth-hood is the limiter of the causing of blue color, so the blue color in the river is the result of superimposing it on the water of the river, which is in contact with the earthy particles in it. We can tell this, since when water is thrown up into the air we see it to be white.

48 (E155-158; T66-68) The body is without consciousness (*caitanya*), because consciousness is not found in dead bodies.

Objection: Consciousness is only awareness (*jñāna*), etc., so why don't you say it is present in living bodies but absent in dead ones, just as you say it is absent in liberated selves.

Answer: No. A body, because of gaining and losing parts continually, is continually being born and dying. If such a body were conscious we could not explain the memory of an old man of what happened in childhood.

Objector: That can be explained by appeal to traces.

Answer: It is overly complex to postulate such a lot of traces. Furthermore, we couldn't explain the tendency of a newborn child to suck its mother's breast. In my own view, however, this last-mentioned tendency should be explained by the memory of what is productive of what one desires and was experienced in a previous birth.

Objector: Then other things experienced in previous births should also be remembered.

Answer: No, since nothing occurs to awaken those traces. But in the case of the child the phenomenon can't be explained otherwise, so we must assume that past merit and demerit which is activating the present life is the awakener.

Objection: The sense-organ can be taken to be the locus and instrument of awareness.

Answer: Then how can we explain a person's remembering his sense-awarenesses after the relevant sense-organ has been removed or lost?

49 (E259-271; T69-78) Vijñānavādin: Consciousness (*vijñāna*) alone is the self. It is is self-illuminating (*svataḥprakāśa*) and has as its specific forms cognition, pleasure, etc. Since it is a positive entity, it is momentary. Each momentary (bit of) consciousness is the cause of the succeeding one, so that the storehouse-consciousness (*ālayavijñāna*) is unobstructed even in deep sleep. And memory, etc. are explicable, since the earlier (moments of) consciousness transmit the traces to the later ones, just as the perfume (*vāsanā*) applied to one bit of a cloth comes to pervade the whole cloth.

Answer: No. If this consciousness knows everything everyone should be omniscient, and we aren't! But if it is confined to a specific content, why is that? And moreover, we should have awareness of objects even in deep sleep, for consciousness implies content.

Objection: The idea is that a formless (*nirākāra*) stream of consciousness continues always.

Answer: No, since how will you show that this stream is a stream *of consciousness*? Why can't it be, say, a pot?

Objector: Pot, etc. are particular forms of consciousness.

Answer: Are these forms over and above consciousness? If so, your position is undermined. And if not, then in a collective awareness (*samūhālambana*) (involving both yellow and blue things) the blue should be the same as the yellow, since there is no difference in the consciousnesses.

Vijñānavādin: Blue-ness, etc, having the form of negations of their contradictories (*apoha*), are properties of consciousness.

Answer: No, for blue-ness and yellow-ness, being contradictories, cannot be properties of the same consciousness. And the transmission of traces (*vāsanā*) (determining the

properties) is not possible, for if so traces could be transmitted from mother to child. But traces (being qualities) cannot be transmitted at all.

Vijñānavādin: This "transmission" is just one consciousness determining a form in a succeeding consciousness.

Answer: No. What produces these traces? If (bits of) consciousness produced them they would be endless.

Vijñānavādin: Then let us assume that certain of the bits of consciousness have the particular ability to produce traces.

Answer: No, for there is no evidence, and besides it is unnecessary. By this line of reasoning the view (of the Vaibhāṣikas and Sautrāntikas) that consciousness resides in momentary bodies is likewise refuted. By the same token, we need not assume a *kurvadrūpa* (cf. Volume II of EnInPh, pp. 62-63) is a seed, since the presence or absence of resulting sprouting can be explained by recourse to auxiliary causes.

Advaitin: So, it should be admitted that eternal consciousness is the self, on the authority of scripture (*Bṛhadāraṇyaka Upaniṣad* IV.5.14; *Taittirīya Upaniṣad* 2.1.1).

Answer: No. For we have shown that eternal consciousness cannot have content, and we have no evidence to suggest that consciousness without content is possible. As for your scriptural authorities, the *Taittirīya* passage ("Brahman is truth, consciousness, endless") refers to Brahman but not to the self, since selves are different from each other and from God. Otherwise there would be no difference between bondage and liberation. Those passages which appear to teach the identity of the self with Brahman are just eulogies of Brahman.

And it should not be held that on liberation the self becomes identical with Brahman, since difference is eternal and cannot be destroyed. Supposing it were destroyed: there would still be two different things--God and Brahman--and thus difference is indestructible.

Objection: But that duality would be destroyed too.

Answer: No, since according to your own view Brahman is without properties--e.g., it does not have truth, it *is* truth. Likewise, though liberation does not have the two entities in question (God and Brahman) it *is* the state constituted by them.

In this way the Sāṃkhya view is also refuted. For according to the Sāṃkhya view (which is briefly detailed) the *buddhi* is the locus of awareness, as well as of effort, pleasure and pain, merit and demerit, and there is no evidence of any

other locus of consciousness other than the *buddhi*.

Sāṃkhya: No, because the locus of consciousness is different from the locus of activity.

Answer: Then why don't you say the same thing about the locus of, say, effort--that its locus is different from that of agency? And if agency and awareness have different loci and the *buddhi* is eternal there will be no liberation, while if the *buddhi* is momentary there will be no transmigration.

Sāṃkhya: The *buddhi* is an evolute of *prakṛti*, thus non-conscious, since its cause, *prakṛti*, is non-conscious.

Answer: There is no good reason to hold this. The agent is beginningless, as is shown by the fact that babies are born with habits born of attachment. And being beginningless, an agent cannot be destroyed, so it is eternal. Thus there is no proof of *prakṛti*. Passages from the *Bhagavadgītā* which appear to speak of *prakṛti* as agent are explained away as referring to *adṛṣṭa*.

52 (E173-176; T81-83) Perception is initially defined as an awareness which is produced by the sense-organs *as* organs. It is noted that God's knowledge is excluded by this definition, which is derived from *Nyāyasūtra* I.1.4. An alternative definition of perception is offered which will include God's perception: perception is an awareness of which awareness is not the causal condition *par excellence*.

Inference is defined as that awareness which is produced by consideration and which does not have the *hetu* as its content. Alternatively, inference can be defined as the awareness whose causal condition *par excellence* is awareness of pervasion.

56 (E180-181;T85-87) The view of the old school is this: Those things which are visually perceptible are also tactually perceptible, except for color and color-hood, etc. In the tactual perception of substances color is a cause.

The new school, however, holds that color is not a general condition of all perceptions of substances through the external organs. Indeed, they believe that nothing is such a general condition, but that the specific conditions must be determined case by case. They argue that if color is a general conditon air cannot be perceived by the tactual organ, since air has no color.

Old school: We accept that air is not tactually perceptible.

New school: Then why not let manifest touch be the

general condition?

Old school: Then diffused light (*prabhā*) will be invisible (since it lacks manifest touch).

New school: Why don't you accept that too (i.e., that diffused light is invisible)? But if both air and diffused light are perceptible then there is no single condition.

57 (E181-184; T87-89) Contact between the organ of touch and the internal organ is a general condition of awareness, because in deep sleep the internal organ goes out of contact with the tactual organ and rests in the "heart" (*puritat*), and there is no awareness.

58 (E186-187; T89-90) Construction-free awareness is beyond the senses. We infer its occurrence prior to each construction-filled awareness, since to know a qualified awareness one must first know the qualifier(s). Construction-free awareness is not perceptible More specifically, in a construction-filled awareness, e.g., "I know the jar", the awareness is a qualifier (*prakāra, viśeṣaṇa*) of the self, the jar is a qualifier of the awareness, and jar hood is a qualifier of the jar. That which qualifies a qualifier is called the "limiter" (*avacchedaka*) of the qualifier-ness (*viśeṣaṇatā*). Now, an awareness which grasps the limiter of qualifier-ness as a qualifier is the cause of the awareness that one qualified thing is related to another. But in construction-free awareness jar-hood, etc. are not grasped as qualifiers, since there is the rule that awareness of universal properties (*jāti*) and compound imposed properties (*akhaṇḍopādhi*) are known without awareness of their qualifiers.

(T187-188; T91-93) Sense-organ-hood is not a proper universal, since it cross-connects with earth-hood, etc. Manifested-ness (*udbhūtatva*) is also not a proper universal, because it will produce cross-connection with white-colored-ness, etc.

Objection: There are various manifested things, so manifested-ness is a proper universal which accompanies white-colored-ness, etc.

Answer: No, since then it could not be the cause of visual and other types of perception.

Objector: But if it is not a universal how can it function as a causal condition of visual perception?

Answer: Because the non-manifested-ness which is concomitant with white-colored-ness, blue-colored-ness, etc. is many and various in form, and manifested-ness is the collection

(*kuṭa*) of the absences of all those qualifiers.

A causal condition *par excellence* is defined as a specific (*asādhāraṇa*) cause, and specific-ness is defined as the property of a thing which possesses an operation (*vyāpāra*).

59-62 (E189-202; T93-99) The operation is in this case the connection between sense-organ and object. Examples of the six kinds of connection are offered.

Why do we not see the blue-color-ness in the blue color of an atom, or the atom's earth-ness, since manifested color and middle-sized-ness are connected there too (these two having been identified as the conditions under which perception arises)? Because the contact between the organ and the object must be accompanied by manifested color and middle-sized-ness, and in the case of an atom middle-sized-ness is not present. Likewise we do not perceive the properties of air because there the contact of air with the visual organ is not accompanied by color. The same applies in the case of tactual sensation--here the contact between organ and object must be accompanied by middle-sized-ness and manifested touch. The point is extended to the other organs, including the internal organ.

The condition of perception of absences and of inherence is the presence of qualifier-ness in what is connected with the sense-organ. The Vaiśeṣikas say that inherence is not perceptible at all. This qualifier-ness is to be regarded as a single entity, even though it has various kinds.

The cause of the perception of an absence is the non-perception of a thing where it would be expected (*yogyānupalabdhi*). E.g., where light is present we can assume that if a jar were present we would see it; since we don't, we perceive the absence of jar. In the dark the above assumption cannot be made; so there is no visual perception of the jar in darkness. But tactual perception is possible in darkness. Now a thing like weight is incapable of being perceived at all, so its absence is likewise not perceptible. Generally speaking, in the perception of relational absences the counterpositive must be perceptible, while in the perception of mutual absences the locus must be perceptible.

63-66a (E202-209; T99-104) There are three kinds of extraordinary perception: *sāmānyalakṣaṇa, jñānalakṣaṇa*, and *yogaja*. The term "*sāmānyalakṣana*" is analyzed so that the term "*lakṣana*" actually means "an object of awareness"; then *sāmānyalakṣana* perception means perception where the

awareness of the universal property is the connecting relation.

Objection: In a case where even without contact with the visual organ, etc. there is awareness of a universal, there will result (on your account) visual perception of all jars, etc.

Answer: No, because the complete collection of causal conditions of perception of that universal must be present before awareness can result; thus in the dark, if we think of jar-ness, say, it does not follow that we see all jars.

The second kind of extraordinary perception, *jñānalakṣaṇa(sannikarṣa)*, involves the connecting relation just of that thing which is the object of awareness.

Objection: But then both this and the previous (*sāmānyalakṣaṇa*) kind of extraordinary perception are the same, since they both involve a connecting relation to an object of awareness.

Answer: The difference is that *sāmānyalakṣaṇa* produces an awareness of the locus of something, the universal property, while *jñānalakṣaṇa* produces an awareness of the connection of its object with something we are already aware of by normal means. Now we perceive all fires as fires by *sāmānyalakṣaṇa*, and all smoking places as smoky places by *sāmānyalakṣaṇa*, but what tells us whether this particular fire is concomitant with this particular smoke? Again, how can we become aware of the smell of sandalwood when we visually perceive that it is fragrant? Or where we cognize a dust-cloud as smoke, what explains that? Therefore we must admit *jñānalakṣaṇa* as an additional kind of extraordinary perception.

Yogis are of two sorts, *yukta* and *yuñjana*. The former kind (having completed yoga) is all-knowing, while the latter kind, still practicing yoga, needs the help of meditation in knowing things like *ākāśa*, atoms, etc. Yogic awareness is the third kind of extraordinary perception.

66b-67 (E209-212; T105-106) The operation in inference is consideration, and the causal condition *par excellence* is knowledge of pervasion.

Old school: The *hetu*'s being known is the causal condition *par excellence*.

Answer: No, since then there could be no inference from a *hetu* which is not yet in existence or has already been destroyed.

68a (E212-215; T106-108) Consideration is the knowledge that the *hetu* occurs in the *pakṣa*.

Mīmāṃsaka: Suppose one is aware that the mountain

possesses smoke and also that smoke is pervaded by fire, but does not cognize the mountain as a locus of smoke-pervaded-by-fire. Inference will still occur, and this shows that consideration is not the cause of inference. Rather, the cause is the knowledge of the *hetu* as located in the *pakṣa*, where this knowledge (of *pakṣadharmatā*) has as its chief qualifier the limiter of the pervaded-ness (*vyāpyatāvacchedaka*), viz. smoke-ness. (I.e., the cause of the inference is the knowledge that the *hetu* (smoke), as a kind of thing whose nature is regularly found with the *sādhya* (fire), occurs in the *pakṣa*.

Answer: No, since even when we are not aware of the *hetu* as being so determined inference still can take place, e.g., when we know that something (unspecified) which is concomitant with fire occurs in the *pakṣa*. Worse, inference will result merely from knowing that the mountain possesses smoke, since here we have a knowledge of the *pakṣadharmatā* which awareness has as its chief qualifier smoke-ness, which is the limiter of the pervaded-ness--though we don't *know* it to be so!

Objection: Then let us say that knowledge of the *pakṣadharmatā* qualified by the limiter of the pervaded-ness where that is known to be such is the cause of inference.

Answer: No, for then inference will take place if Caitra is aware of the pervasion, while Maitra knows the *pakṣadharmatā*.

Objector: O.K., then specify it must be the same person who knows both.

Answer: Then each inference and each cause will be different from person to person; there will be an endless number of inferences (of the same form) corresponding to endless numbers of inferers. This defect does not vitiate *my* explanation.

68b (E216-219; T109-111) Pervasion is the non-relation (of the *hetu*) to what is other than a locus of the *sādhya*. E.g., (in the stock inference) smoke is in no relation to lake, etc. which are things other than loci of fire. But in a fallacious inference, e.g., "this has smoke, because it has fire", we find that the *hetu*, here fire, is present in objects other than loci of smoke, e.g., in a red hot iron ball.

The expression "what is other than loci of the *sādhya*" is to be understood to indicate things which possess a difference whose counterpositive-ness is limited by *s*-possession. So, even though smoke may be present on some specific hill which is different from kitchen, etc., this does not vitiate the definition.

Further, the non-occurrence of the *hetu* in things other than the loci of the *sādhya* has to be understood to be with respect to that relation that the *hetu* bears to the *sādhya*. E.g., even though smoke is present by inherence in its own parts, and those parts are things other than loci of the *sādhya*, still the inference is valid since smoke is not present in its parts by contact, which is the relation claimed to pertain between the *hetu* and the *sādhya*.

69 (E220-230; T112-125) Alternatively, pervasion is a *sādhya*'s having the same locus as a *hetu*, where the *sādhya* is not the counterpositive of any absence whose locus is the locus of the *hetu*. This definition is shown to deal with the difficulties arising from one smoke being present in one fire-locus but absence in the loci of other fires, etc.

Objection: Consider "This has properties pervaded by color-ness, because it has earth-ness, etc.". Here the limiters of the *hetu* are properties pervaded by color-ness, and these properties (e.g., white-color-ness) are the limiters of the counterpositive-ness of an absence whose locus is a blue pot. So the inference should be invalid, but it isn't.

Answer: No. If it were so nothing could have properties pervaded by color-ness. But in fact the properties pervaded by color-ness are indirectly the limiters of the *hetu*, so they are not absent in earth. Or else we can understand the definition to require that the limiter of the limiter of *s* must not be the limiter of the limiter to the counterpositive-ness residing in the absence of the *hetu*.

The locus of the *hetu* should be understood to be the locus of what is qualified by the limiter of *hetu*-ness. So that, in "This is a substance, because it has existence qualified by difference from quality, motion, etc.", even though substance-hood is a counterpositive of an absence (of quality, etc.) residing in pure existence, nevertheless the definition does not under-extend and so does not miss this valid inference.

An absence must be understood not to have the same locus as its counterpositive. Thus, in "this has contact with monkey, because it is this tree", even though contact with monkey is the counterpositive of that absence of contact with monkey located in the roots, still the definition does not under-extend, because the contact of monkey in the branch does not have the roots as the locus of its absence's counterpositive. More correctly, the definition should be understood to say that that absence qualified by occurrence in what is not the locus of its counterpositive occurs in the locus of the *hetu*.

Likewise, in "what is not the locus of its counterpositive" the "locus of the counterpositive" must be understood as qualified by the limiter of the counterpositive-ness, and with respect to the relationship alleged to exist between the *hetu* and the *sādhya*.

Objection: Do you mean that "what is not the locus of the counterpositive" is (1) not the locus of any of the counterpositives qualified by the limiter of the counterpositive-ness, or (2) not the locus of all such counterpositives, or (3) not the locus of what is qualified by any limiter of the counterpositive-ness? If (1), the inference about the monkey in the tree becomes invalid, since contact with monkey is the locus of one of the counterpositives qualified by the limiter of the counterpositive-ness. If (2), the definition fails to apply anywhere, since every absence has the same locus as that counterpositive which is the absence of itself in the just-preceding moment. As for (3), consider "this has absence of contact with monkey, because it is a self"; take as a limiter of the counterpositive-ness the absence of quality-hood. Then the limiter of the counterpositive-ness (of the absence of contact with monkey) is absence of quality-hood, and since absence of contact with monkey does reside in the self, the definition fails to show this valid inference to be valid.

Answer: No, for we must understand the definition to specify that we can only pick as limiter of the counterpositive-ness anything which is not present in the locus of the *hetu*.

Objection: Consider "Time is jar-possessing, because it has temporal dimension". Here there is nothing which is the locus of an absence qualified by occurrence in what is not the locus of its counterpositive, since the locus of the *hetu*, viz. big-time (*mahākāla*), is the locus of everything, i.e., every absence resides in the locus of its counterpositive by the same relation as that of the limiter of the *hetu*-ness, viz. temporal qualification. So the definition under-extends.

Answer: Some say: Here the absence of pot qualified by difference from big-time has a different locus from its counterpositive-ness, since even though big-time is the ground of pot, it is not the ground of pot as qualified by difference from big-time, since big-time is not different from itself. But actually, the way to handle this is to require that the counterpositive-ness of the absence residing in the locus of the *sādhya* must be qualified both by the limiter of the *sādhya*-ness and by the

appropriate relation. Now in "time is jar-possessing, because it has temporal dimension", absence of pot by contact occurs in the locus of the *hetu* (viz. big-time), which (big-time) is not the locus of the counterpositive of the absence of pot through contact. So the definition is all right.

70 (E231-237; T126-129) The *pakṣa* is that in which there is lacking certainty without the desire to infer. When we know that the *hetu* exists in the *pakṣa* inference results.

The desire to infer is not sufficient to establish *pakṣa*-hood (*pakṣatā*), since one infers even without any desire to, e.g., infers rain from thunder. But even if there is certainty about the thing to be inferred, still if there is the desire to infer inference will take place. So both are required.

Objection: It may happen that after consideration has yielded certainty there will ensue the desire to infer; but there will be no inference since the consideration doesn't last long enough. In other cases too, the desire to infer and the certainty are not simultaneous.

Answer: The definition has to be specified more exactly as follows: Where there is either perception or memory that the hill, which has smoke pervaded by fire, has fire, coupled with absence of certainty and a desire to infer, *pakṣa*-hood arises. But it must be clear that the desire must be for inference, not for any sort of awareness, and more particularly, it must be a desire to infer in a manner which is thwarted by the sort of certainty in question. That is, it is certainty that the hill has fire which thwarts the stock inference, not some other certainty.

Further, in a case where one first doubts whether it is a man or a post one sees, then learns that it has hands, etc. but does not desire to infer, and then comes to know it is a man, perception of man-ness occurs, not inference.

71 (E238-244; T129-132) There are five fallacies of the reason: deviation, contradiction, unproved, counterbalance and sublation.

A "fallacy" is that actual entity, the content of an awareness, which thwarts an inferential result. So, since an awareness which has as its content deviation (*vyabhicāra*), etc. thwarts an inferential result, it is a fault (*doṣa*).

"The content of an awareness" here means that content qualified in a particular sort of way. Therefore, even though one may mistakenly believe that something is the case and thus inference is thwarted, still that does not vitiate the definition. E.g., even if one believes that the mountain lacks fire that does

not constitute a fallacy. So says the old school.

Others say that being a fallacy is possessing that which is the content of an awareness which thwarts inference. E.g., counterbalance thwarts inference, and it does so in virtue of the judger's knowledge that the *h* is counterbalanced.

72 (E244-256; T132-140) The new school says: A fallacy of the reason is any of the five kinds of fallacies listed at the outset of this section.

There are three kinds of the fallacy of deviation--called too general (*sādhāraṇa*), too specific (*asādhāraṇa*), and inconclusive (*anupasaṃhārin*). A too general reason is one the *hetu* of which occurs in things other than those which possess the *sādhya*-property; it blocks knowledge of pervasion. A too specific reason is one the *hetu* of which does not have the same locus as the *sādhya*. Others say that the too specific reason is one the *hetu* of which does not occur in any *sapakṣa*, where "any *sapakṣa*" is to be understood as anything which definitely possesses the *sādhyas*. So in "sound is non-eternal, because it has sound-ness" the reason is not too specific since the *hetu* definitely resides in the *pakṣa*. In an inconclusive reason the *hetu* is found everywhere. It blocks knowledge of negative pervasion.

The contradictory reason is where the *hetu* is the counterpositive of an absence which is pervaded by the *sādhya*, It blocks inference by providing a sufficient condition for knowledge of the absence of the *sādhya*.

The counterbalanced reason is one where the *pakṣa* possesses a property pervaded by the absence of the *sādhya*. Others say: the counterbalanced reason is the content of an awareness, not known to be false, that the *pakṣa* possesses a property pervaded by absence of the *sādhya*, at the same time that one has the awareness, not known to be false, that the *pakṣa* possesses the *sādhya* property. It blocks inference by producing inconsistent awarenesses.

Objection (commentators say this is the author of the *Ratnakośa* speaking): If two competing awarenesses are both grounded in perception (say, because of some defect in the organ), doubt arises. Likewise in the case of the counterbalanced reason an inference does take place, of a doubting variety. However, if one once has the awareness of one of the two awarenesses the other is obstructed, and so no doubt arises.

Answer: This is wrong. If one knows that a thing

possesses the absence of something he will not spontaneously perceive that thing there--so such knowledge obstructs all awarenesses that are not born of normal sense-object contact or by particular defects in the organs. Otherwise one will have to postulate a different kind of obstruction for every different kind of awareness, which will be overly complex. This being the case, no inference, even of a doubting sort, can take place; doubt arises just when, and only when, one has reason to believe both that the *p* has and that it does not have the *s*, where both judgments are not known to be invalid.

The unproved reason is of several sorts. (1) *āśrayāsiddha* occurs when there is in the *pakṣa* absence of the limiter of the *pakṣa*-ness. E.g., if the inference is "this golden mooountain has fire", and one knows that this mountain is not made of gold, consideration is blocked. (2) *Svarūpāsiddha* is the absence in the *pakṣa* of the *hetu*. In "the lake is a substance, because it has smoke", if the hearer knows that the lake doesn't have smoke this fallacy occurs. (3) *Vyāpyatvāsiddha* includes *sādhyāprasiddha* etc. *Sādhyāprasiddha* is the absence in the *sādhya* of the limiter of the *sādhya*-ness. When one becomes aware of it, it blocks consideration, e.g., in such an inference as "the mountain has fire mad of gold". Similarly, *sādhanāprasiddha* is when one knows that the limiter of the *hetu*-ness is absent from the *hetu* given.

The sublated *hetu* is the absence of the *sādhya*-property in the *pakṣa*. When one is convinced of this, inference is blocked, unless it is opposed by normal perception or perceptual error.

Objection: Awareness, including doubting awareness, that the *pakṣa* is related to the *sādhya* is the cause of inference, and sublation and counterbalance are fallacies because they block such awareness.

Answer: No, since then no inference could occur where the *sādhya* is not known to occur outside the *pakṣa* (i.e., in only-negative inference). But such inference does occur.

Objection: Sublation is just deviation if the *hetu* occurs in the *pakṣa*, and if the *hetu* is absent from the *pakṣa* it is *svarūpāsiddha*.

Answer: No, since sublation is different from deviation, etc. according to the *muni* (i.e., Gautama). After consideration, if one comes to realize that sublation is present, there is no scope for deviation (which only blocks pervasion which has already been cognized).

73-78 (E256-260l T141-145) The traditional account: The too general (*sādhāraṇa)* reason is where the *hetu* is present in both the *sapakṣa* and the *vipakṣa*. The too-specific (*asādhāraṇa*) reason is where the *hetu* is absent from both *sapakṣa* and *vipakṣa*. The inconclusive reason is where only a *sapakṣa*, and no *vipakṣa*, can be provided. The contradicted reason is one in which the *hetu* is never present in the locus of the *sādhya*. *Āśrayāsiddha* is *pakṣāsiddha*, i.e., where a mountain made of gold is the *pakṣa*. *Svarūpāsiddha* is as above. *Vyāpyatvāsiddha* is where the *hetu* is, say, blue smoke: blue-smoke-ness cannot be the limiter of the *h*-ness, for there would result the fault of heaviness. Counterbalance occurs when two opposed things occur in the consideration. And sublation is the case where what is qualified by the limiter of the *pakṣa*-ness is without the *sādhya*. E.g., "the pot at its first moment of existence possesses smell", or "the tree as limited to its root has monkey-contact".

79-80 (E260-261; T145-147) Comparison is explained through the standard illustration about being told that a *gavaya* resembles a cow and later identifying an actual cow. The operation in a comparison is the memory of the meaning of the sentence (here, "the word '*gavaya*' means a thing which resembles a cow"). Knowledge of the denotation of a word such as "*gavaya*" is the result of comparison.

81 (E263-285; T148-158) The causal condition *par excellence* of verbal awareness (*śābdabodha*) is the knowledge of words--although the words do not have to be actually spoken or written, since a saint may mentally recite verses, etc. The operation in verbal awareness is memory of the meanings of words according to their signifying function (either direct (*śakti*) or indirect (*lakṣaṇā*). Verbal awareness is the result of this, and it is aided by our awareness of the meanings of words.

Denotative capacity (*śakti*) is the relation of a word to its meaning or object. It is born from God's willing that such-and-such a word should mean that kind of thing. Even recently-coined names have denotative capacity, since there is divine authority in such a saying as "on the eleventh day a father should name his child". The old school holds that recent names have no denotative capacity. The new school, however, holds that it is not merely God's will but anyone's will which constitutes denotative capacity. Knowledge of a word's meaning, though, is derived from grammars, dictionaries, comparison, reliable testimony, usage and other causes. There

follows an extended discussion of various aspects of meaning-theory as regards the meaning of case-endings, number, etc.

"From... usage" (*vyavahāra*)--we learn the meanings of words as children from watching how elders behave when addressed using certain words.

Prābhākara: A sentence such as "there is a blue pot on the ground" will not lead to verbal awareness, since there is no action (injunction) associated with it.

Answer: No. One may initially learn the denotation of a word from its juxtaposition with injunctive expressions ("bring a jar"), but later on one should discard this requirement on pain of over-complexity. E.g., if one says "Caitra, a son has been born to you (the good news) and your unmarried daughter is carrying (the bad news)", one can infer from the expressions on the hearer's face that he is first happy, then sad, and conclude by inference that it is what he has heard that caused the reactions--but here there are no actions or injunctions in the area.

Objection: Here we must supply the implied injunction, e.g., "Look here! Caitra, a son....", etc.

Answer: No, for consider "Caitra, a son was born to you but is now dead"--here no injunction is appropriate.

Bhāṭṭa: Then the meaning of a word is always in connection with some other thing.

Answer: No, that is unnecessarily complex.

Mīmāṃsaka: The meaningful capacity of a word is with respect to the universal property, not an individual, since otherwise there would be deviation (i.e., more things than one would be meant), and indeed the items meant by a word would be endless.

Answer: No. Without denotation one could not come to know individuals at all.

Objection: The individual is known through secondary meaning (*lakṣaṇā*).

Answer: Certainly not; for we become aware of an individual directly from its designation by a word, without any notion of secondary meaning. (Secondary meaning only comes in when there is untenability of the primary meaning.) And the number of individuals isn't "endless", since "cow", e.g., designates all the cows in virtue of their possessing cow-hood, but nothing else. Furthermore, if the word "cow" designated cow-ness rather than, say, Bossie, we shouldn't be able to recall the meaning of the word "cow" in application to other cows,

since the rule is that when one grasps the meaning of a word one grasps the chief qualifier of it--i.e., the universal. If "cow" meant cow-ness cow-ness couldn't be the chief qualifier, since it would be what is meant itself. Your view will become unnecessarily complex.

That which has denotative capacity is the word (*pada*). There are four kinds of words: derivative (*yaugika*), conventional (*rūḍha*), derivatively conventional (*yogarūḍha*), and both derivative and conventional (*yaugikarūḍha*). An example of a derivative word is "cook" (*pācaka*): it is a word where only the meanings of the component parts (here, root and suffix) are known, and the meaning of the word is derived therefrom. A conventional word, such as "cow" or "circle", is one whose meaning is known through its collective denotation. An example of a derivatively conventional word is "*pākaja*", meaning lotus. "*Pākaja*" etymologically means "mud-born", and conventionally designates a lotus. According to the old school the conventional meaning blocks the etymological, so that the word does not come to be used to refer to other mud-born things, e.g., a water-lily. But the correct view is that the two meanings become joined together unless they conflict with each other, in which case the word may come by secondary meaning to denote the water-lily; this may even happen when it is not intended.

82a (E285-302; T158-165) A secondary meaning of a word is something related to the direct meaning but which is incompatible with the intention of the speaker. E.g., "there is a village (lit. a colony of cowherds) on the Gaṅgā"--here the word "Gaṅgā" primarily denotes the river, but since the speaker clearly doesn't intend to place the village in the water, the word is understood to mean the bank of the river, and thus is called its secondary meaning.

Where the primary meaning of a word is indirectly related to the word's meaning it is called *lakṣitalakṣaṇa*. Consider a word such as "*dvirepha*" (meaning two 'r's), which calls to mind *bhramara* (a word with two 'r's) meaning "bee", so that "*dvirepha*" comes to mean a bee.

According to the old school the word bearing the secondary meaning (e.g., "Gaṅgā" in the example two paragraphs back) does not produce the verbal understanding that there is a village on the banks of the Ganges; rather, some other word (here, "village") generates knowledge of the meaning, for the rule is that a word has the capacity to produce

comprehension of its direct meaning as connected with the meaning of some other word (or words) through either direct or secondary meaning. However, the new school holds that "Gaṅgā" does produce understanding of its meaning through its operation.

Since a sentence has no primary meaning it has no secondary meaning either.

There follows extended discussion of how to analyze the meanings of compounds.

82b-83 (E302-309; T166-170) Awareness of contiguity, fitness, expectancy, and speaker's intention is the cause of verbal understanding (*śābdabodha*), i.e., understanding of the meaning of an utterance.

Contiguity is the juxtaposition of words in a comprehensible order. Thus "*giribhūktamagnamān devadattena*" ("hill, eaten, fiery, by Devadatta") does not cause comprehension, while "*nīlo ghaṭo dravyam paṭa*" does, since the hearer construes it to mean "a blue jar" and "a cloth is a substance", even though the speaker meant a blue cloth and a jar's being a substance. So an error about contiguity doesn't necessarily produce a false verbal cognition.

Objection: When someone says "*cchatrī kuṇḍalo vāsasvi devadattas*" ("Devadatta with an umbrella, ear-ring and clothes") the memory of each succeeding word destroys the memory of the preceding word, and so there must be an interval between the hearing of a word (in a string) and its memory.

Answer: No. The awareness of each word produces a trace, and the final memory of all the words is produced by these traces without an interval; the recollection of the last word activates the traces of all the previous words. How else could there be a single recollection of the various syllables in a word?

Some answer this by appealing to the analogy with pigeons in a barnyard--just as the pigeons all come down simultaneously in a barnyard, so the meanings of all the words in a sentence simultaneously become related to each other. Others say that the meanings of words are first understood from each word by itself, and likewise the meaning of the sentence is understood from remembering those meanings of the words.

The word-*sphoṭa* theory is refuted hereby, since understanding of the meaning of a word can be explained merely by the awareness of the last syllable together with the

memory-traces of the other syllables; it is this which allegedly manifests the *sphoṭa*, and so the *sphoṭa* theory is unnecessary.

It should be noted here that understanding of the meaning of a word such as "door" arises from becoming aware of another word, e.g., "shut", and not from the meaning of that other word (viz. shutting).

83b-84 (E309-317; T169-172) Fitness is the relation of the meaning of one word with that of another. It is because this fitness is lacking that no understanding is conveyed by such a sentence as "they water plants with fire".

Objection: Awareness of fitness isn't possible before one already has understanding of the meaning of the sentence, since sentence-meaning is not prior to fitness.

Answer: From recalling the meanings of the words alone one can become aware of their consistency, either as a matter of certainty or of doubt.

The new school says that fitness is not a cause of understanding meaning. The reason why no awareness ensues when one hears "they water with fire" is because of a conviction that one cannot water with fire.

Expectancy in word *x* occurs with respect to a word *y* without which *x* will not produce an awareness. E.g., a noun does not lead to a positive understanding without a verb, and so it has expectancy with regard to a verb. Thus a string such as "pot, object-hood, bringing effort" produces no understanding, whereas an otherwise ambiguous string of words with appropriate case-endings disambiguates the meaning.

If speaker's intention were not a cause of understanding "bring the *saindhava*" would always be ambiguous ("*saindhava*" meaning both a horse and salt).

Objection: What disambiguates such sentences is context.

Answer: No, for there is no common feature among all the things which you bulk together as context. Or if there is, let awareness of speaker's intention be the term naming such a feature. So, in the case of the Vedas one postulates that God's intention is expressed in them.

Objection: No, it is the intention of the teacher who interprets the Vedas that is expressed there.

Answer: No, for at the end of *pralaya* there is no teacher.

Objection: There is no such thing as *pralaya*.

Answer: But the Vedas say there is! So even a parrot's words are understood because of God's intentions about the

meanings of the parrot's squawks, unless the meaning doesn't accord with fact, in which case we may suppose that the parrot's trainer's intention is the cause.

(E319-327; T173-174) Concerning memory. The cause of memory is previous experience.

Objection: It is not previous experience (*anubhava*) that is the cause, but previous awareness (*jñāna*). Otherwise one memory cannot be followed by another memory, since a memory having the same qualifier as its predecessor destroys the trace laid down by that previous memory. So it must be that $memory_1$ produces $memory_2$ through another trace.

Answer: No. When one has a collective experience of several things and then remembers successively single things in that collection, but not the entire collection, it can't be that the memory of a single item destroys the trace laid down by the collective experience, but something else does--perhaps time, or disease, or the final memory.

Objection: Then how do repeated memories lead to deeper (*dṛdhatara*) traces?

Answer: "Deeper" here means the more immediate activating of the trace.

85 (E327-333; T175-176) The internal organ is the causal condition *par excellence* in immediate awarenesses of satisfaction, etc. It is of small size, since awarenesses are not simultaneous. It is the internal organ's connection which determines which sense-objects are cognized at a particular moment.

Objection: This non-simultaneity is due to *adṛṣṭa*.

Answer: In that case we can get along without the visual and other organs altogether.

Objection: Surely there are simultaneous awarenesses born of different senses, e.g., when one eats a cake and both tastes, feels and sees the cake.

Answer: No. Simultaneity is an illusion here; the several sensations occur in very swift succession.

86a (E333-342; T177-178) Quality (*guṇa*) is defined.

Objector: What is the proof of quality-hood (*guṇatva*)?

Answer: Since there must be some universal property residing in whatever has causality and limiting its scope, and since neither color-hood (e.g.,) nor existence (*sattā*) can be the necessary property (one being too narrow, the other too wide), we must postulate such a property.

86b-99 (E345-371; T177-189) The various qualities are compared and contrasted in the standard fashion.

100 (E373-393; T185-189) Colors, as well as the universals inhering in them, are contents of perception.

Objection: Blue is a single color; so blue-color-ness, which you claim to be a universal, cannot be, since it inheres in one thing only.

Answer: No, for if so once a blue-color had been destroyed there would be no more blue-color anywhere!

Objector: But it is simpler to hold that there is one blue-color, and it inheres in many substances.

Answer: We perceive that the same kind of blue-color recurs, and this outweighs appeal to simplicity. Furthermore, by parity of reasoning you might as well say that there is only one pot, one cloth, etc., and that the notion of their being made and destroyed only has to do with the inherence of the one pot, etc. in things.

The colors are listed, including variegated-color. The reasoning for admitting variegated-color as a separate kind of color is rehearsed. Variegated-touch is to be admitted for the same reasons. But this is only the view of the old school. The new school holds that there is no separate variegated-color, but that the parts of a thing may be qualified by different colors.

101-104 (E394-395; T189-190) Taste and touch are explained.

105 (E395-423; T1919-198) The Vaiśeṣika position on cooking (*pilupākavāda*) is explained, according to which the pot has to be broken down into its atoms while in the oven to change color when it gets baked. This is then worked out in a theory of how many moments it takes an atom of a baking pot to change color. The number of moments will be nine, ten or eleven depending on certain assumptions about disjunctions produced by disjunction. If this kind of disjunction is not admitted the process takes nine moments, as follows, starting with (1) the destruction of the dyad in which the atom in question resides, and followed by (2) the destruction of the previous color of the atom, (3) then the new color arising in the atom, (4) followed by motion due to heat in the atom and (5) disjunction of the atom, leading to (6) destruction of the previous contact and (7) contact productive of a new substance. From this comes (8) production of a new dyad, and (9) the new color in that dyad.

Objection: Why not let the motion (4) take place at the moment occupied by (2) or (3)?

Answer: No, since unless there is destruction of the motion (4) accompanied by presence of the new color the atom will not undergo a new motion, because a new motion cannot be produced in something already having a motion, and a substance without qualities cannot move to produce a new substance, and because the destruction of one color is a causal factor of, and thus precedent to, the production of another color.

Similarly, processes taking ten or eleven moments are set forth. Other assumptions are mentioned, under which the process takes, five, seven or eight moments.

106a (E422-423; T198-199) The Naiyāyikas' *pitharapākavāda* is explained. The assumption here is that the fire (heat) can penetrate into the parts of the pot without their being broken progressively down to the ultimate atoms. This theory is evidenced by the fact that we recognize the same pot before and after it is baked. In special cases where we do not recognize it we must admit that the aggregate pot is destroyed in the oven.

106b-109a (E425-456; T198-202) Number is the cause of our common experience of counting things. Of the numbers, the number one is eternal in eternal substances, non-eternal in non-eternal substances. Numbers from two to *parārdha* arise from enumerative cognition, and their destruction also arises from enumerative cognition.

The number two, three, etc. reside in many loci at once (i.e., pairs, triplets, etc.) and so reside in a single pot, etc., which may form an element in such groups. But since we have the notion that one is not two, it is to be understood that a particular relation called "*paryāpti*" resides in the many substances.

The process by which the notion of two is destroyed is as follows: first there is (1) an enumerative cognition, then (2) the notion of two things, then (3) the construction-free cognition of the qualifier two-ness, followed by (4) perception of what possesses that qualifier (viz. two) together with the destruction of the enumerative cognition, and finally (5) destruction of the notion of two. Enumerative cognition is an unusual kind of awareness in that it lasts three moments rather than the usual two, as is implied by the foregoing; if it did not do so, it would be destroyed at moment three and no perception of two would take place before it gets destroyed.

What is this enumerative cognition? It is the idea of

many single things together. Śrīdhara and Udayana are cited as holding distinct views on whether we have a notion of an indefinite number of things--Śrīdhara says we do, but Udayana thinks this is just the notion of three which is, because of a defect in us, not recognized, since otherwise we couldn't explain how we might cognize that this army has more soldiers than that one when both are known to have an indefinite number of soldiers.

109b-113a (E457-463; T201-205) Size is discussed. Destruction of the size of a thing occurs whenever the thing changes either through addition or subtraction of parts. This is insisted on even in the face of common-sense judgments to the contrary.

113b-114 (E463-465; T204-207) Objection: Since wherever there are separate things there is always found to be mutual absence of one in the other, why not eliminate separateness from the list of qualities in favor of mutual absence?

Answer: Because the judgment "*x* is separate from *y*" is a distinct judgment from "*x* is not *y*".

115-120 (E465-473; T207-211) Contact and disjunction.

121-125a (E473-474; Y211-212) Farness and near-ness.

130 (E481-482; T214-215) Doubt is the awareness of the presence and absence of some property in one and the same locus. It arises from awareness of attributes shared by the two states, or from a property being absent from some of the instances of each of two kinds of things. It does not arise, however, from disagreements, since a disagreement is something verbal which may serve to remind us of one of the previous two causes for doubt, and doubt is a mental, not a verbal, awareness.

131 (E482-483; T216-217) Untrue awareness arises from defects (*doṣa*), and true awareness from positive good features (*guṇa*).

Objection: Why not just say that truth arises from the absence of defects?

Answer: No, since in that case when we erroneously perceive a shell as yellow because of jaundice we wouldn't even perceive truly that it is a shell.

Objector: Well, positive good features of some sort may be present and we still may not perceive the shell as what it is.

Answer: Then we might as well say that absence of good features is responsible for error!

132-134 (E483-484; T217-218) The good features in true awareness differ depending on whether the awareness is perceptual, inferential, comparative or verbal.

135-136a (E484-486; T218-220) Or we can explain true awareness as that awareness of something which possesses that property which is the chief qualifier in the awareness. Thus we validly know the shell as shell, even if we wrongly cognize it as yellow because of jaundice.

Objection: Then memory will become true, and its causes will become additional instruments of knowledge.

Answer: No, only the cause *par excellence* of direct awareness counts as instrument of its knowledge.

An outcome of this explanation of true awareness is that construction-free awareness is neither true nor false, since it has no chief qualifier.

Objection: If this account is correct, one's awareness that the monkey is in contact with the tree is true and false as well!

Answer: No, the sense is that a false awareness is an awareness of something *x* which has the absence of the property which is the chief qualifier of the awareness, where the absence is not compresent with its counterpositive.

Objector: Then awareness of monkey-contact in the branch (say) even when there is no monkey there will still not be false, since the absence of monkey-contact there is compresent with its counterpositive!

Answer: Then we'll have to say that awareness of contact of *x* in a part of *y* where contact with *x* is absent is false. This complicates the definition of necessity, but that is no fault of ours.

136b (E485-489; T221-225) Vs. *svataḥprāmāṇya*. The section briefly summarizes Gaṅgeśa's *Prāmāṇyavāda*.

137 (E490-491; T225-2226) How pervasion becomes known.

138-140a (E491-496; T225-233) An obstruction (*upādhi*) is defined as something which pervades what is thought to be the *s* but does not pervade what is thought to be the *h*.

Objection: Consider "that man is dark-complexioned, because he is Mitra's son". Here that man's eating spinach should count as an obstruction, but it doesn't on your definition, since it does not pervade dark-complexioned-ness, as there are things that are dark-complexioned (e.g., pots) which do not eat spinach. Or consider "wind is perceptible, because it is the locus of perceptible touch." Here possessing manifested color cannot be an obstruction, since it is present in things where color is absent, e.g., selves. Or, thirdly, how about "posterior absence is destructible, since it is produced"; being a positive thing (*bhāvatva*) is not an obstruction here (as it ought to be) since destructibility is present in things (e.g., prior absences) which are not positive.

Answer: No. As for the first case, we must understand the definition to intend that the obstruction must not pervade the *hetu* as limited by a property which is possessed by the *sādhya* pervaded by that obstruction. Thus eating spinach does pervade that dark-complexioned-ness which is found in Mitra's sons, but it does not pervade Mitra's sons (since some of them are or may be dark-complexioned even if they don't eat spinach).

Likewise, in the second case possession of manifested color does include the perceptibility of external substances (of which air is one), but it does not pervade all external substances.

And in the third case, being a positive thing includes all destructible things which are produced.

So an obstruction must be something which is always present when the *sādhya* is, and in some locus of which the *hetu* occurs without either the *sādhya* or the obstruction.

What the obstruction does is to cause us to infer that the *sādhya*-property may be absent from the *pakṣa*. E.g., in "this mountain has smoke because it has fire" we note that the property of being a locus of smoke may be absent from a locus of fire, since fire may exist without damp fuel (the obstruction), and since fire-with-wet-fuel pervades smoke it must pervade this place on the mountain too. But where the obstruction pervades the *sādhya*-as possessed-of-some-property, the absence of the obstruction in something else possessed of that property leads us to infer that the *pakṣa* actually may lack the *sādhya*-property. Thus, in "he is dark, because he is Mitra's sone", the absence of the obstruction eating-spinach in some of Mitra's other sons leads us to infer that this son may lack the *sādhya*-property.

What about the property of being-other-than-the-*pakṣa* (*pakṣetaratva*)? Is it an obstruction? There are three cases to consider. (1) Where *pakṣetaratva* is not known to be concomitant with a *hetu* which is sublated, then it is not an obstruction, since there is no evidence to suggest that

pakṣetaratva pervades the *sādhya*, and it would undermine arguments which are evidently valid. But (2) where *pakṣetaratva* is known to be concomitant with a *hetu* which is sublated, then it is an obstruction, e.g., in "fire is not hot, because it is produced", where we know from perception that fire is hot. Case (3) is the case in which it is doubtful whether the obstruction pervades the *sādhya*--in the case of *pakṣetaratva*, however, it is a tradition among debaters not to put this forward as an obstruction of this sort.

Others say that the result of an obstruction is to provide an example of counterbalance. E.g., in "the red-hot iron ball possesses smoke, because it possesses fire", which produces in us the contrary argument "the red-hot iron ball has no smoke, because it lacks wet fuel", and this is counterbalance. On this interpretation, an obstruction is something which pervades the *sādhya* but is not present in the *pakṣa*.

140b-141 (E496-500; T232-0233) The Vaiśeṣikas say that testimony and comparison are not distinct instruments of knowledge, but kinds of inference. Thus, e.g., understanding of presently produced words arises from the inference that the words are intended by their speaker to have that relationship with each other according to the meanings the hearer recalls them to have, because the words have expectancy, etc. like other groups of words whose meaningfulness is accepted. Likewise, in comparison one infers that the word "*gavaya*" means something having *gavaya*-hood from the usage of one's elders.

But this Vaiśeṣika view is incorrect, since understanding the meanings of words is well-known not to require any awareness of a pervasion; there is no evidence to show that understanding a word only accompanies knowledge of concomitance between that word and its meaning. Furthermore, if you insist that nevertheless there must be concomitance there, why shouldn't we assume that wherever there is inference there is knowledge of the meanings of the words (in the inference)--then we can abandon inference in favor of testimony altogether!

142-143 (E500-503; T233-237) Only-positive and only-negative inferences are distinguished. There are two kinds of pervasion, positive and negative. Negative pervasion is the counterpositive-ness of that absence which pervades absence of the *sādhya*. I.e., the *hetu*, as limited by a certain property *y* pervades the *sādhya* in the *pakṣa* as determined by a specific

property (say, *x*) in a particular relation, comes to be known in a particular manner. The manner is this: from awareness of something (the *vipakṣa*) as possessing an absence determined by *x*, and whose counterpositive-ness is determined by the particular relation (that *x* holds to the *sādhya*), we infer absence of the *hetu* which is determined by that relation, and the counterpositive-ness of which is determined by *y*. So, e.g., from coming to be aware in a lake of the absence of fire, whose counterpositive-ness is limited by contact, we infer the absence of smoke, whose counterpositive-ness is limited by contact, and so become aware of negative concomitance.

Some, however, say that from awareness of negative concomitance we become aware of (positive) pervasion; the awareness of negative concomitance is not a cause of inference, but the awareness of pervasion which arises is called "negative" because of its conditioning.

144 (E503-504; T237-239) Presumption (*arthāpatti*) is not a distinct instrument of knowledge, since its purpose is served through awareness of negative pervasion.

Likewise, non-perception (*anupalabdhi*) is not an added instrument of knowledge, since we perceive absences. In addition, if it be supposed that non-perception could produce valid awareness without itself being known, then it will be itself perception, while if it produces true awareness only by being known there will be an infinite regress.

Gesture (*ceṣṭā*) (i.e., pointing) is not an added instrument of knowledge, since it only causes us to recall words which conventionally determine their meanings.

145-149a (E504-509; T240-242) The qualities pleasure, frustration, desire and aversion are explained.

149b-152 (E510-536; T243-256) Effort (*prayatna*) is of three varieties--activity (*pravṛtti*), inactivity (*nivṛtti*), and that which causes life (i.e., breathing).

The causal factors producing activity are: the desire to do the act, the belief that the act is feasible through one's effort and that it will produce what one wants, and immediate awareness of the materials for the act.

Prābhākara: Activity is produced just by the belief in the act's feasibility through one's effort, which involves desire to do the act. The belief that it will produce what one wants is not a causal factor, for then one will not be inclined to perform the prescribed (*nitya*) acts even though one believes them feasible.

Objection to the Prābhākara: But the belief that

something is beyond one's power to do blocks activity.

Prābhākara: No, it is simpler to suppose that belief in feasibility is the causal factor rather than the absence of an obstacle.

Objector to the Prābhākara: But again, on your principle one should act to procure and eat food made of honey and poison.

Prābhākara: No, for the cause of activity is that belief in feasibility which is produced from awareness of a certain property of oneself--e.g., of one's desire in the case of optional (*kāmya*) acts such as sacrificing or cooking, or of one's ceremonial purity (*śaucya*), etc. in the case of the prescribed acts.

New Prābhākara suggestion: Let the cause of activity be belief in its feasibility as a means to something desired and which is not attended by undesirable consequences.

Prābhākara: No, it is impossible to be aware simultaneously of feasibility and being a means to what is desired, since they are contraries. What is feasible is not yet accomplished, and what is a means must be already accomplished, so one thing cannot be known as both these.

Objection: There is no such difficulty, since one thing can perfectly well be an end at one time and a means at another, and we can easily have at one time an idea of a thing's being both.

New Prābhākara: The idea that something is feasible through one's own effort is not a cause of activity, since that notion is with respect to something in the future (and thus not available to perception or inference). Rather, they say, one becomes aware that someone else can perform a certain kind of act, and judges that he too is like that other person and thus is prepared to act.

Answer: No. Some acts are not preceded by any such notion--e.g., when one is first impelled to write down one's own composition, or in youth when one first makes love.

One must realize, then, that it is the belief in being a means to desired results at the present time which is responsible for activity. So, a boy who may become a prince later does not act like a prince now, for he does not know now that he will be one; likewise, one whose stomach is full does not eat, since he does not believe it will lead to desired results. But an angry man may take poison, not being aware (because of his anger) of its producing undesirable results.

Objection: How can one who knows the scriptures still act in perverse ways, since he knows his acts will lead to undesirable results?

Answer: His knowledge of those undesirable results is obscured by passion, etc.

Objection: There is no awareness of desirable results relating to the performance of obligatory rites like the *sandhya*--so how can there be activity? Indeed, if there were any notion that such an act conduced to desirable results it would not be obligatory, but rather optional.

Answer: No. There is no reason why the same act cannot be both obligatory and optional at once.

Prābhākara: Ritual activity arises from awareness that such an act is to be done, such awareness given to us from the Vedas.

Answer: If one does not believe such activity to be a means to what one desires he will not act, whatever the Vedas say.

Prābhākara: But the result of an obligatory action is a barren (karmic) trace (*apūrva*) (i.e., it doesn't produce any desirable or undesirable result).

Answer: If so, nobody would care to perform the act.

Prābhākara: Yet devout men do desire such results, and do perform such acts.

Answer: Then, on the analogy of certain sacrifices (e.g., *rātri-sātra*, for which the scripture mentions no result, and so a result such as fame is assumed), we should assume some beneficial result, e.g., the avoidance of demerit.

Objection: There is the injunction "One should not eat meat killed with a poisoned weapon (*kalañja*)". How is the "not" here to be understood? It cannot indicate the absence of being a means to a desired result, nor can it indicate lack of feasibility through one's own effort (since eating this meat is both possible to desire and feasible).

Answer: Then here the injunction means that eating this meat is productive of highly undesirable consequences.

Objection: Then "one who wishes to kill the enemy should perform the *śyena* sacrifice" should, by parity of reasoning, mean that such an act is not attended with highly undesirable consequences--but it is, since its result is death! Thus the act constitutes injury (*hiṃsā*), which leads to hell.

Answer: One should define "injury" as "an activity contributing to death of which *adṛṣṭa* is not the means". Then

the *śyena* sacrifice is excluded from the definition, as well as, e.g., the worship of Śiva for the purpose of dying in Banaras.

Objection: An act directly contributing to death is injury, and the *śyena* sacrifice is not such an act; nevertheless it contributes to death through its production of demerit (*pāpa*).

Answer: No, for then if someone wounds a Brahmin with a sword and he later dies of that cut, it would not count as an injury.

Some say that the result of the *śyena* sacrifice is not death but injury. Thus cutting with a sword brought on by the *śyena* sacrifice causes injury, from which arises demerit, and so the scriptures which enjoin it do not enjoin something which (directly) causes demerit; nevertheless good people are not inclined to do it, since they anticipate the demerit which will accrue.

The Ācārya (i.e., Udayana) holds that the meaning of an injunction is the intention of a trustworthy person. Thus every optative suffix indicates desire, since that view is more economical. So the meaning of the injunction "one who desires heaven must sacrifice" means that sacrifices are desired by a trustworthy person as feasible through the effort of one who desire heaven, and others infer from the fact that an act is desired by a trustworthy person that it is a means to something desirable, and so is inclined to act accordingly. Now in the case of eating meat killed with a poisoned weapon, a trustworthy person has no inclination to do it.

This shows that the Vedas have an author--since there must be a trustworthy person whose desire is the meaning of the injunctive suffixes of Vedic injunctions.

Objection: But no author of the Vedas is remembered!

Answer: Such an author is referred to by Kapila, Kaṇāda and other old sages. And if one does not accept this reasoning and their authority, then the *smṛtis* also should be without an author. As a matter of fact, the Vedas themselves speak of an author (*Ṛgveda* X.90.9: "From Him sprang the Vedas....")

Objection: If the Vedas had an author they could be erroneous and so they would be non-authoritative.

Answer: No, for their author is God, who is eternal and omniscient.

153-157 (E137-1398; T256-258) The qualities weight, liquidity, and viscidity are examined.

158-161a (E138-140; T259-262) Three kinds of dispositional tendencies are distinguished: inertia, elasticity and

traces.

The cause of a trace is a definite (non-doubting) awareness which is not accompanied by indifference.

Objection: Non-indifferent definite awareness is the direct cause of memory, since there is no memory in the case of indifference. So why not let awareness as such be the cause of the trace (which, when accompanied by non-indifference, produces memory).

Answer: No, since it is unnecessarily complicated to have to assume the production of a trace in the case of an awareness accompanied by indifference.

Traces are inferred as the causes of both memory and recognition.

Objection: Then there will be no difference between memory and recognition.

Answer: No, there is no proof of that. Others (Gaṅgeśa) say, however, that the cause of recognition is memory, which is in turn caused by traces.

161b-164a (E541-543; T262-266) *Adṛṣṭa* comprises merit and demerit. Merit is what leads to heaven, etc. and is inferred to be the operation of sacrifices, etc., for without an operation sacrifices, being transitory, could not lead to heaven later on. (Udayana is quoted.)

Objection: The operation is just the destruction of the sacrifice.

Answer: No, for in an act such as bathing in the Ganges there are an indefinite number of destructions of contact with water, and all of them would have to count as operations, whereas on our view we just simply postulate one *adṛṣṭa*.

Objection: No operation needs be postulated at all, since invariable antecedence is not always a condition of causality.

Answer: If there were no *adṛṣṭa*, contact with the water of the *karmanāśa* (which removes karma), etc. could not function as it does: for such contact cannot effect a sacrifice which has already occurred.

Objection: The only result of sacrifice is satisfaction of the gods.

Answer: No. The gods cannot always be satisfied by acts of ours, and for Viṣṇu, for example, satisfaction, since it is a kind of pleasure, is impossible.

Merit and demerit are produced by traces (*vāsanā*) and are destroyed by knowledge.

Objection: It is said that only experience (*bhoga*) can

destroy merit and demerit--so how can knowledge do so?

Answer: "Experience" there means all kinds of ways of destroying merit and demerit--otherwise how could, e.g., *prayaścitta* destroy demerit? *Bhagavadgītā, Muṇḍakopaniṣad* quoted.

Objection: If so, a knower of reality cannot persist embodied, and cannot have any experiences, since all his actions (*karman*) have been destroyed by knowledge.

Answer: No, for it is only the actions other than the *prārabdha* actions that are destroyed, and it is the *prārabdha* actions that are responsible for current embodiment and the experiences therein.

164b-168 (E244-247; T266-268) The work concludes with a discussion of sound.

26. RĀGHAVA PAÑCĀNANA (1570)

The eldest son of Janakīnātha Bhaṭṭācārya Cūḍāmaṇi. If (as suggested previously) Janakīnātha can be dated around 1540 the present author should have flourished around 1570.

26.60. RĀGHAVA PAÑCĀNANA, *Ātmatattvaprabodha*

"According to Prof. D. C. Bhattacarya, Rāghava criticizes Raghunātha Śiromaṇi's views on *kṣanikatva* and speaks of him as *Navya*" (UM p. 421). NCat 2, p. 46b's reference to a manuscript, located at Bomb. Uni. 2051, that "refutes Buddhism" and makes "reference to one Cūḍāmaṇi as the author's friend", is likely to be to this work.

Prabal Kumar Sen remarks that this work is "modelled after *Ātmatattvaviveka* of Udayana." (Sen 2001, Volume One, p. lxx).

26.61. RĀGHAVA PAÑCĀNANA, *Granthivimukti* on Raghunātha Śiromaṇi's *Ākhyātavāda*

Cf. Cat. I. O. # 2048 for manuscript citation.

26.62. RĀGHAVA PAÑCĀNANA, *Ratnāvalī*

Prabal Kumar Sen reports that he discovered the first page of a manuscript of this work in the bundle which contained the only complete manuscripts known of the commentaries on the *Nyāyasūtras* by Rāghava Pañcānana's father Janakīnātha Bhaṭṭācārya Cūḍāmaṇi and his brother Rāmabhadra Sārvabhauma. That first page contains the first

two verses, which Sen provides in Sen 1978 as well as in Sen 2001.

27. ANANTA BHAṬṬA (1570),

We know nothing about the author (or authors) of the following four works.

27.63. ANANTA BHAṬṬA, *Jatiśaktivāda*

See NCat I, 170 for manuscript citations.

27.64. ANANTA BHAṬṬA, *Padamañjarī*

Cf. NCat I, 174 for a citation.

27.65. ANANTA BHAṬṬA, *Padārthacandrikā*

NCat I, p. 176 cites a manuscript.

27.66. ANANTA BHAṬṬA, *Tarkamṛtataraṅginī*

Cf. NCat VIII, 134.

28. RĀMABHADRA SĀRVABHAUMA BHAṬṬĀCĀRYA (1570)

He was the son of Janakīnātha Cūḍāmaṇi Bhaṭṭācārya, and the teacher of Jagadīśa as well as of Gaurīkānta, Mathurānātha Tarkavāgīśa and Jayarāma Nyāyapañçānana. Prabal Kumar Sen claims he was also the teacher of Śrīrāma Tarkavāgīśa, Mathurānātha's father, and of Harirāma Tarkavāgīśa. Ingalls (p. 21, footnote 85) provides conclusive evidence that Rāmabhadra was a pupil of Raghunātha Śiromaṇi, citing the introductory verse of #28.73 below, where he clearly state that his teacher was Śiromaṇi.

Ingalls also remarks: "The most extraordinary confusion has prevailed as to the identity of Rāmabhadra Sārvabhauma. (Fitzedward) Hall thought him the son of Raghunātha (confusing Raghunātha's title Śiromaṇi with Janakīnātha's title Çūḍāmaṇi). Aufrecht by error attributed to him the parents of Śaṃkara Miśra (two manuscripts were bound together). Gopinath (Kaviraj) corrected Aufrecht but went back to Hall's theory. Finally, the editor of the *Tanjore Catalogue* tries to make him out a grandson of Jagadīśa when he was obviously Jagadīśa's teacher." (Ingalls p. 21, footnote 86)

Chakravarti p. 280 attributes to Rāmabhadra a work on Tantra titled *Ṣaṭcakrakramadīpikā* and describing the six circles

of the Tantric system.

Prabal Kumar Sen gives the date of this author as around 1525-1575. If his father Janakīnātha Cūḍāmaṇi can be put at 1540, as suggested above, we can place Rāmabhadra as having flourished in 1570, which barely allows for him to have been alive and of student years at the end of Raghunātha Śiromaṇi's lifetime.

28.67. RĀMABHADRA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Vyākhyā* on Udayana's *Nyāyakusumāñjalikārikās*

"E" references are to the edition by N. C. Vedantatirtha, found in Ashutosh Sanskrit Series 2, 1944. In his introduction the editor discusses the question of the authorship of the work. There is no translation.

Summary by V. Varadachari

I.1 (E1) Introductory Verses. The word "*padayuga*" (in Udayana's initial verse), which means "pair of feet", is given several different interpretations. On one, it means the individual self and the Highest Self. On another, it means scripture and inference, while it is added that here inference is meant primarily and "scripture" must be understood to corroborate conclusions arrived at by inference. Still again, the word means *tarka* and inference, or positive and negative inference. Or it may mean two inferences, one of which is based on God's authorship of the Vedas and His creation of the world, the other on the last inferential cognition of everything.

I.2 (E3) By interpreting the word "*svarga*" to mean liberation while living (*jīvanmukti*), and "*apavarga*" to mean final liberation, the author seeks to offer an Advaitic flavor to his interpretation.

(E4) Udayana says that worship of God is the means for obtaining both heaven and liberation, while the Nyāya tradition holds that knowledge (*tattvajñāna*) is the means for getting liberated. The commentator reconciles these by citing passages such as *Śvetāśvatara Upaniṣad* 3.8 which declare that the knowledge of God is a cause of liberation and that this knowledge is obtained through *adṛṣṭa* or direct knowledge of one's own self.

I.3 (E7) The "Mahāpāśupatas" referred to by Udayana are identified by Rāmabhadra as Mahāvratīyas, those who have taken the great vows. The Jains' looking on God as "uncovered" (*nirāvarana*) is construed as their viewing Him as formless or sinless. In explaining the Mīmāṃsaka view of God as one who is to be worshiped, the commentator follows Vardhamāna in saying that God here is meant to be of the form of *mantra*, *bījākṣara* ("hidden seed"), etc.

(E8) Rāmabhadra cites *Taittirīya Upaniṣad* 3.1.1 and *Chāndogya Upaniṣad* 6.8.7 and argues that, since non-duality between the self and God is meant here, knowledge of that non-duality is the cause of liberation. This is offered in elucidation of the Nyāya view that knowledge of one's own self is the means of getting liberation through cessation of activity. Yet Rāmabhadra points out a difference between the Nyāya and Advaita views, in that to the Advaitin these passages indicate actual non-duality whereas for the Naiyāyikas they only indicate that non-difference should be reflected upon.

I.11 (E29) The issues discussed in Vardhamāna's commentary on this section are raised by Rāmabhadra in the context of a question about whether one produces a trace (*saṃskāra*) in an idol when one touches it in the course of worshiping. Udayana explains that the Mīmāṃsakas believe that no trace is produced since the worshiper is aware that the idol is already consecrated. Vardhamāna insists that this knowledge is required in order that no trace be produced. Rāmabhadra comments that this was the view of the old school, but the *navyas* have a different view. They say that the absence of an occasion for the idol to have been touched by those who are unfit to touch it is the cause for there being no trace produced, and thus no knowledge is required.

Rāmabhadra adds some information about "others", who say that the act of consecration produces traces only in those who perform the consecration. Those traces, or *adṛṣṭa*, remain even when the sacrificer gets release. Only *adṛṣṭa* which produces experience prevents attainment of liberation, and this *adṛṣṭa* gets destroyed when the idol is touched by someone unfit to touch it. On the other hand if one assumes that a trace exists in the idol through its being consecrated, then that trace must have been destroyed when a limb of the idol was rubbed. So traces need not be supposed to have been produced by the act of consecration.

I.15 (E34) Rāmabhadra makes it clear that according to Nyāya there is no universal of the sort the Buddhists refer to as *kurvadrūpa*.

III.7 (E55) Some say that we can perceive the absence of

deviation in smoke seen previously, just as we can perceive absence of pot on the ground, and that this perception is accomplished through recognition of smoke-ness. Thus, there is no reason to doubt whether such smoke really is smoke, and no such doubt arises. Thus *tarka* is not always needed to determine absence of deviation.

III.22 (E72) Vardhamāna suggests that in perception of an absence the sense-organs operate to provide awareness of both the absence and its locus. Rāmabhadra remarks that this interpretation need not be admitted, since when sandal paste is seen from a distance, an awareness "the sandal paste is fragrant" may arise, but here, though the olfactory sense grasps the fragrance, the awareness is a visual awareness preceding the olfactory awareness.

V.1 (E86) The word "*śruteḥ*" ("from scripture") is taken by Rāmabhadra to stand for such works as *Viṣṇusaṃhitā, Nārāyaṇopaniṣad, Rudrādhyāya* and *Kaivalyopaniṣad* which speak of God.

(E90) Various views about atoms are mentioned. Atoms are said by some to be constantly in motion and to take the place of God (literally, "are coronated to take His place") and function as He is said to. Others say that the atoms of air are always in motion and so air is called "*sadāgati*".

(E91) Rāmabhadra criticizes Raghunātha Śiromaṇi's view that there is a causality relation between jar-ness and volition. Raghunātha's argument is that it is easy to infer that a broken jar is a result of volition, and likewise therefore we can infer that there must be an agent whose volition is eternal, viz. God. But Rāmabhadra rejects this argument, since it will lead to admitting the potter's stick as eternal. So rather it should be said that jar-ness determines those products created by (certain) volitions.

V.7 (E98) Early writers held that a Vedic injunction is what is accomplished by volition and achieves the desired end. But Udayana defined an injunction as the intention of a trustworthy person which produces inference of the means to the desired end.

28.68. RĀMABHADRA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Nyāyarahasya* on Gautama's *Nyāyasūtras*

As noted in the introductory comments on #12.28 above, this author collaborated with his father Jānikīnātha Cūḍāmaṇi in writing a commentary on the *Nyāyasūtras*, the two works having been difficult to locate until the fortunate discovery of a manuscript of them by Prabal Kumar Sen, who (in Sen 2001) has published the two together in a two-volume edition. Prof. Sen helpfully provides a host of information, for example specifying some forty-nine distinct occasions on which Rāmabhadra adopts a different reading of the *sūtras* from those accepted by, e.g., Uddyotakara. Although he does not provide a translation, the copious footnotes in the second volume pick out many passages of particular interest because they illustrate Rāmabhadra's thorough knowledge of and keen interest in the interpretations of other Naiyāyikas both of the "old" and "new" schools.

28.69. RĀMABHADRA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Prakāśa* on Raghunātha Śiromaṇi's *Padārthatattvanirūpaṇa*

The work has been edited by V. P. Dvivedin in The Pandit n.s. 25, 1903-36, 1914 (reprinted Banaras 1914). CSCR 36, p. 264 remarks: "The author of this commentary in course of refuting the categories makes an attempt to establish:

(i) the *jātitva* of *bhūtatva* and *mūrtatva*,

(ii) and *śakti, kāraṇatva* and *saṃkhyā* (number) as separate categories."

28.70. RĀMABHADRA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Siddhāntasāra* on Jānakīnātha Cūḍāmaṇi's *Nyāyasiddhāntamañjarī*

Umesh Mishra (UM p. 424) says this was a collection of many *vādas*, of which only the *Mokṣavāda* has been discovered.

28.71. RĀMABHADRA SĀRVABHAUMA BHAṬṬĀCĀRYA, *(Suvarṇa)Taijasavāda*

Gopinath Kaviraj (GK p. 64) tells us: "In this work, Rāmabhadra refers to the current notion of the logicians regarding the igneous character of gold". A Calcutta manuscript is noted in CSCR 36, pp. 193-194, which comments: "Gold is not apprehended by all as a *specium* of *tejas*. This book tries to establish that position with arguments."

28.72. RĀMABHADRA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Guṇarahasya*

NCat 4, p. 154a locates several manuscripts of this work.

28.73. RĀMABHADRA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Śabdanityatvavāda*

Umesh Mishra says "a manuscript of it is preserved in the Sarasvati Bhavana, Benares". (UM p. 424)

28.74. RĀMABHADRA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Vyākhyā* on Raghunātha Śiromaṇi's *Nañvāda*

NCat 9, p. 324a as well as Umesh Mishra locate a manuscript of this work. See also CSCR 47, pp. 744-745.

28.75. RĀMABHADRA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Vyākhyā* on Raghunātha Śiromaṇi's *Ākhyātavāda*

This work has been edited by Prabal Kumar Sen (Calcutta 1979).

28.76 RĀMABHADRA ṢĀRVABHAUMA BHAṬṬĀCĀRYA, *Ṭīkā* on Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

Rai Monmohan Chakravarti Bahadur (op. cit.), p. 280) claims that fragments of this work exist, specifically noting a *Vāyuvāda*, *Nañvāda* and *Samāsavāda*. UM (p. 424) has also noted "a work on *Samāsaśakti* of the *Śabdakhaṇḍa*," and provides the first stanza.

28.77 RĀMABHADRA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Tarkavādārthamañjarī*

CSCR 47, p. 714 calls this manuscript a unique one, not otherwise noticed. Unfortunately, it adds that the manuscript is mostly illegible.

28.78. RĀMABHADRA SĀRVABHAUMA, *Rahasya* on Udayana's *Kiraṇāvalī*

Cf. NCat IV, 154 for manuscript citations.

28.79 RĀMABHADRA SĀRVABHAUMA, *Pramāṇatattva*

See A. C. Burnell, *A Classified Index to the Sanskrit Mss. in the Palace at Tanjore* (London 1880), #120a for manuscript citation.

29. VIŚVANĀTHA TĪRTHA (1570)

Dineshchandra Bhattacharya (DCB p. 185) remarks that a manuscript of Mādhava Miśra's "was transcribed at the instance of Viśvanātha Tīrtha (probably of Varanasi, author of a commentary named *Komalā* on Śaśadhara's *Nyāyasiddhāntadīpa*)." The manuscript, he tells us, is dated 1632 V.S., which corresponds to 1575. Viśvanātha Tīrtha is probably the brother of Padmanābha Miśra and Govardhana Miśra and the son of Balabhadra Miśra.

29.80 VIŚVANĀTHA TĪRTHA, *Komalā* on Śaśadhara's *Nyāyasiddhāntadīpa*

See NCat 5, p. 94b for manuscript locations.

30. BHĀSKARA (1570)

Anantalal Thakur (ODVS p. 350) give us information about this author and his work: "Prof. D. C. Bhattacharya (VNNC, p. 262) informs us of one Bhāskara, the pupil of Balabhadramiśra (1500-1550) who wrote a Vaiśeṣika tract in 278 *karikās*. Its name is *Guṇaratnāvalī* (Kashi Sarasvati Bhavan, Ms. No. 908, fols. 10.

30.81. BHĀSKARA, *Guṇaratnāvalī*

A. L. Thakur again, ibid.: "Prof. [D. C.] Bhattacharya asserts that Bhāskara composed this *Guṇaratnāvalī* during the lifetime of his preceptor ([i.e., Balabhadra Miśra]."

"The very title of the tract suggests that it deals with the twenty-four Vaiśeṣika qualities alone. The author salutes Śiva in the first benedictory verse. Though the tract is composed in verse....Bhāskara mentions and analyses in it the views of others as if it is a prose tract...."

"Color has been the very first topic of discussion in the tract and it is done in detail with the introduction of two chemical processes, *pīlupāka* and *piṭharapāka*. That the author admits variegated color (*citrarūpa*) is indicated when he asserts: *citraṃ rūpaṃ hi necchānti kecin mūḍhatvam āśritāḥ* (verse no. 15). The author contends that the water of Kālindī, though it appears to be blue, is not really so (verse no. 19). The topic of knowledge leaves ample sign of author's clear admittance of the four *pramāṇas* and thorough knowledge of them (verses nos. 69-81). Five inference-components are accepted by the author (verse no. 73). Weight (*gurutva*) was admitted only in two categories, earth and water (verse no. 93). It is an example that the people were quite ignorant about the weight of air...."

31. PADMANĀBHA MIŚRA (1578)

Dineshchandra Bhattacharya (DCB p. 123) refers to "Padmanābha Miśra, belonging to a Bengali family settled at Varanasi and adorning various royal courts of North India..." He is identified by several historians as the son of Balabhadra Miśra, author of a *Balabhadrasandarbha,* and elder brother of Govardhana, the author of a *Tarkabhāṣāvyākhyā*. NCat IV, p. 153 identifies him as "alias Pradyotana Bhaṭṭa, son and pupil of Balabhadra and brother of Viśvanātha....patronized by Vīrabhadra of Vāghela dynasty of Bundelkhand". We estimate his date around 1578, when he wrote a *Vīrabhadradevacampu* in praise of King Vīrabhadra.

Anantlal Thakur (ODVS pp. 303-304) provides an extended account, listing a number of otherwise unknown works of this author. "He was mainly a dweller of Kashi but his academic life was spent in different royal courts outside Kashi. He was not a Maithila, as some believe. Anyway, with a huge volume of commentaries and some original works Padmanābha is a resplendent figure in the field of Indian philosophy."

Besides the works listed below, Thakur ascribes the following two philosophical works to Padmanābha: *Vardhamānendu* (probably a commentary on *Nyāyanibandhaprakāśa*), undiscovered; *Bhuṣaṇavinyāsa*, undiscovered.

31.82. PADMANĀBHA MIŚRA, *Pakṣadharoddhāra* or *Bhāvaprakāśa* on Jayadeva's *Tattvacintāmaṇyāloka*

Manuscripts of this work are held in the Baroda (No. 11968) and Poona (No. 35 of 1887-91) manuscript libraries.

31.83. PADMANĀBHA MIŚRA, *Kiraṇāvalībhāskara*

"E" references are to the edition by Gopinath Kaviraj in Princess of Wales Sarasvati Bhavana Texts No. 1, 1920. NCat 4, p. 153b remarks that this work "explains matters not touched by Vardhamāna".

Summary by V. Varadachari

Introductory Section (E3) At the outset, the author states that he is commenting on the *Kiraṇāvalī* as he was instructed by his father, who was also his preceptor.

While commenting upon the benedictory stanza he notes others' comments. The deity involved here is the sun or the moon or God, according to them.

(E7) The benedictory stanza in the *Padārthadharmasaṃgraha* reads thus in the first half: *praṇamya hetum īśvaram munim kaṇādamanvataḥ*. Udayana interprets the word *praṇamya* as formed with the suffix *-ktvā*, which shows that salutation is to be performed at a point of time before the work is undertaken. Padmanābha offers interesting remarks on this. The old Naiyāyikas held that the suffix *-ktvā* denotes the time of action as immediately preceding that of the action denoted by the finite verb. The "new" school holds that to be denotative of the prior time. Gaṅgeśa takes it to mean immediate succession. The Mīmāṃsakas take it to indicate that its agent is the same as that of the finite verb. The Grammarians say it conveys prior time and the common agency for it and for the finite verb.

The significance of the preposition *pra-* is also discussed. The Naiyāyikas hold that prepositions convey the purport of the root with which they are used, while the Mīmāṃsakas say that prepositions have only significative potency (*śakti*) in conveying excellence of the sense of the root.

(E37-38) Regarding the motion of darkness, it is observed that darkness is perceived at a particular place on account of the obstruction of light. When that obstruction is not there, darkness is not perceived. However, it is observed elsewhere. Hence that which moves is noticed elsewhere. Similarity between the moving darkness and a moving object is not binding on error. Really speaking, there is no awareness of motion in an individual unit. Darkness, which is noticed in a particular place, is not perceived in a different place. Yet the particulars, which belong to the class of darknesses, have relationships to other regions.

(E40) Pragalbha Bhaṭṭācārya is stated to have held darkness to be the absence of the color light having fully-developed brilliance.

(E60) Dispositional tendencies (*saṃskāra*) are of three kinds: impetus, traces and elasticity. The first and the last are in earth and other things and the second is in the self. Some hold that elasticity is found in the internal organ.

(E68) On Udayana's definition of a too-specific reason as one of the only-negative sort, the commentator notes the interpretations offered by others. One set of thinkers remark that the word "only" (*kevala*), meaning exclusion, is intended to avoid over-extension of this definition to a *hetu* which is of the

positive-negative sort. It is not a peculiarity of the *hetu* to be only-negative. Others interpret the word *viśeṣa* as proving verbal usage or difference. Therefore what does not prove either of these cannot become the definition even if it is exclusively negative in kind.

(E69) Padmanābha observes that a *hetu* which distinguishes the thing being defined from things belonging to similar and dissimilar items cannot have a positive example. So a *hetu* which functions appropriately in a definition must be of the only-negative kind even when it applies to similar cases.

(E71) Udayana refers to a view held by some thinkers who preferred to treat an instrument of knowledge as sufficient to determine (the nature of) everything and who gave up definitions on the ground that a definition would require another definition, thus leading to infinite regress. In answer to this, Udayana says that the instrument of knowledge which is held to determine the nature of an object will have to do so by avoiding under-extension and over-extension, as well as according with usage, and this is nothing but a definition. The maxim of censuring a drink and at the same time taking it applies here, for definitions are rejected for adoption but are in fact adopted under the cover of what determines the appropriate instrument of knowledge. Padmanābha remarks that the basis of a definition lies in its determining how the object to be defined possesses the difference from those other than itself. Perception cannot achieve this in all cases. Inference does it in certain cases. If it is not applicable in a given case then there will be the defect of a part of the *definiendum* not being covered (*bhāgāsiddhi*) and if there is over-pervasion there will be deviation. A definition which avoids both these defects functions negatively when positive pervasion presents itself. Thus this amounts to admitting the *hetu* of the only-negative sort as the definition in the guise of rejecting it in favor of instruments of knowledge.

(E74) The various colors are available only in earth. They do not occur at the same time, but arise due to the effect of cooking.

(E125-126) While rejecting the contention of some scholars who seek to prove that earth is distinct from the other eight substances in virtue of their affirmative character, ignoring the inference of the only-negative sort, Udayana notes that the role of the only-negative method functions on the strength of expectancy and impropriety. Padmanābha takes up

the elucidation of impropriety (*anupapatti*). A specific feature of a thing presents itself at the very first awareness of it--but this is precisely the awareness that is supposed to be improper. If the feature is not cognized awareness of the object cannot arise at all. When the proposed, affirmative method is adopted, that specific feature of the object becomes known without which awareness of it will not arise. Also, a feature cognized may be insufficient to allow us to determine the general nature of the object; here, the only-negative method is resorted to for finding out other specific features in order to justify that general nature. So, the particular nature of the object is determined only when its general nature is settled, on the ground that the awareness of it is not fully supported by awareness of any affirmative features.

(E144) Some scholars argue that time need not be cognized at all. The objects which are treated as the conditions that differentiate time may, by themselves, account for using the expressions to refer to the occurrences as past, present or future. Padmanābha notes that the objects referred to here need not serve as the conditions but as the nature of time itself, in the opinion of some scholars. Others, he reports, prefer to take moments, and others themselves, to serve as the conditions.

On direction, Padmanābha observes that "left" and "right" refer to the universals in the limbs of the body. The word *avāk*, which is used to refer to the southern direction, is taken by Padmanābha as referring to the left. The words *pratīpa, carama* and *udak* refer to the right.

31.84. PADMANĀBHA MIŚRA, *Rāddhāntamuktāhara* and *Kaṇādarahasya* thereon

Anantalal Thakur (ODVS p. 344): "*Rāddhāntamuktahāra*, and its commentary *Kaṇādarahasya*, are the Vaiśeṣika works of Padmanābhamiśra (sixteenth century A.D.), the worthy son of Balabhadramiśra....That *Rādhāntamuktāhara* was a versicle composition containing eighty-one *kārikās* is known from its auto-commentary as the text is unfortunately lost. *Kaṇādarahasya* is available in manuscript (Poona ms. No. 86 of 1866-68, 22 fols., date of copying: 1586 Śaka)."

31.85. PADMANĀBHA MIŚRA, *Vardhamānendu* on Vardhamāna's *Kiraṇāvalīprakāśa*

NCat IV, 153 says this work is "based on his father's (i.e., Balabhadra's) *Yuktikalpadruma*." See manuscript citations at

NCat 11, 130a. Thakur, ODVS p. 297 cites "a complete manuscript at Pune (No. 166 of A. 1882-83). It is a beautiful commentary on *Dravyakiranavālīprakāśa*."

31.86. PADMANĀBHA MIŚRA, *Parīkṣā* on Gaṅgeśa's *Tattvacintāmaṇi*

Manuscript citations at NCat 8, p. 36c.

31.87. PADMANĀBHA MIŚRA, *Vyākhānunaya* on Vallabha's *Nyāyalīlāvatī*

A manuscript of this work exists. Cf. Adyar D. VIII. 464-65 (cited in NCat 11, 129b). Anantalal Thakur (ODVS p. 323) tells us "The commentary is preserved in the Adyar Mss. Library. Ms. No. 40, B. 12." Thangaswami Sarma (in DM) informs us that some portions of the text was printed in the Journal of the Adyar Library, [i.e. Adyar Library Bulletin] VIII, 1944, pp. 111-116."

31.88. PADMANĀBHA MIŚRA, *Sāra* on Śrīdhara's *Nyāyakandalī*

R. Thangaswami Sarma (DM p. 111) notes this work, as does Gopinath Kaviraj (GK p. 24).

31.89. PADMANĀBHA MIŚRA, *Setu* on Praśastapāda's *Padārthadharmasaṃgraha*

"E" references are to the edition by Gopinath Kaviraj and Dundhiraja Sastri in Chowkhamba Sanskrit Series 61, 1924-31. Section numberings correspond to sections of the summary of *Kiraṇāvalī* in EnInPh Volume Two.

Anantlal Thakur (ODVS, pp. 303-304) provides a number of helpful comments about this work.

Summary by V. Varadachari

Padmanābha makes some interesting comments in the introductory verses to this commentary. It is being composed to serve as a bridge to understand the works of Udayana, he says. Evidently he means that Udayana's *Kiraṇāvalī* requires some preparation which Padmanābha is providing in the present work. Thus the work is likened to an ocean which ebbs at the moonrise of the *Kiraṇāvalī*.

Besides the works listed above, Padmanābha makes reference to a work of his on aesthetics titled

Ālaṃkārabhāskara.

(E3-7) There is an elaborate and intricate discussion concerning the meaning of verbal forms used with prepositions. As example, the word "*praṇamya*" (the "respect" paid to God) is taken up for treatment. Prepositions convey meaning only in relation to the sense of the root. Some scholars hold that prepositions together with either the root alone or the root prefixed by the preposition have denotative capacity (*śakti*). On the other hand, the Naiyāyikas say the root has secondary meaning (*lakṣaṇā*), but not the root as prefixed by the preposition. The preposition helps the word's meaning but does not have meaning by itself. Padmanābha defends the Nyāya theory.

(E7-8) The word "*praṇamya*" is a gerund conveying the sense of an action that has taken place before the present time. The Naiyāyikas of the old school hold that this denotes the time immediately preceding, but Padmanābha shows that this interpretation is incorrect, since the gerund is used even when there is an interval between the occurrence it refers to and the time of the subsequent reference to it.

(E9) The old school holds that the completion of a work consists in the awareness of the work's final syllable (*varṇa*). But this is not correct, since there might be an obstruction, and so the invocation is held to have as its intended result the destruction of obstacles standing in the way of completion. Udayana is in agreement with this interpretation. Padmanābha adds that this view of Udayana is known to only a few people. Gaṅgeśa, who knew this, adopted Udayana's view as his own in the *Maṅgala* section of *Tattvacintāmaṇi*.

(E9-11) A question is raised concerning the scriptural authority for providing an invocation at the beginning of one's treatise. Since the presence of a causal relation is vitiated by finding that the alleged cause and effect are not regularly concomitant, the objector points out that experience shows that there is no regular concomitance between invocation and completion, thus refuting Vedic authority on this score. Citing Udayana, Padmanābha shows that scriptural authority is not affected--lack of experienced concomitance vitiates causality of perceptible items, but not of things made known by scripture.

The author adds that the awareness of the final syllable represents the completion of the work undertaken whether that completion comes through hearing or through mental activity.

Other views are mentioned on these points. One view is that the delay in getting the result is due to some cause other than the invocation and as such does not affect the invocation from becoming the cause. Another view holds that a single invocation cannot lead to a successful end of the work, since many obstacles lie in wait.

(E11-18) Padmanābha further argues that some undertake an invocation with the intention of completing the work, others for getting it completed without having to face any obstacle, but that in some cases there will be no obstacle or the obstacles may get destroyed by other means. So parsimony supports keeping this latter kind of case in mind. Really, there is no Vedic authority to cite here at all; inference alone is sufficient. The invocation gives rise to *adṛṣṭa*. Otherwise how can the syllables which constitute the invocation and which endure for only two moments destroy the obstacles? The penultimate and final syllables together cause the destruction of the obstacles, and here *adṛṣṭa* plays its role. The other syllables, since they get destroyed, do not produce any result. Padmanābha says these syllables are fruitless.

(E18) In reality, the expressions which produce awareness of the virtues of the deity praised in an invocation is not an invocation at all, for it is not impossible for a man observing silence to offer his prayers to God. Hence the invocation, which takes the form of obeisance, is of the nature of syllables which are capable of conveying praise of God.

(E20) The word "*tattva*" in "*tattvajñāna*" ("awareness of the true nature of the categories") must mean the mutual differences among the categories, since one cannot know their "real nature" otherwise.

(E20-21) Padmanābha explains the process of getting liberated as follows: Awareness of the true nature of the categories can lead to the complete destruction of erroneous awareness. This result can also be gotten from practice of merit (*dharma*). That is, one has to follow the instructions of God which are in the form of the Vedas, and so conduct his life according to them without any expectation of reward. This will also lead to direct awareness of reality. The study of the *śāstras* provides an understanding of the causes by which one can acquire awareness of the categories: having gotten it one should meditate on it and so turn the inferential result into direct awareness. Thus inference, reflection, meditation and direct awareness are the four interdependent factors which together

form the root cause of liberation. It is the Vedas that validate this.

(E21-23) In this context Padmanābha refers to the views of various schools on the means to liberation. He argues that neither action nor knowledge of the categories by itself can lead to liberation. If ritual action is held to produce liberation alone, then since knowledge will have no scope erroneous awareness will not be removed and so liberation will not ensue. On the other hand, dying at Banaras is held to lead to liberation, and there knowledge of the categories appears to be of no use. But it cannot be explained how a life culminating in death at Banaras can produce liberation, unless because of living at Banaras awareness of the categories arises which leads to liberation.

(E23-26) Mere combination (*samuccaya*) of ritual action and knowledge of the categories does not constitute the proper analysis of the means to liberation. The Sāṃkhya and Yoga accounts are considered and refuted. Liberation cannot consist in the removal of the subtle body (*liṅgaśarīra*), says Padmanābha, since the Nyāya school does not admit the subtle body. Nihilistic and materialistic theories are rejected. Likewise, views held by other schools of Buddhists as well as that of the "Pakhandas" (perhaps the Pāśupatas?) and Digambara Jains are set aside.

One view mentioned is that liberation is the prior absence of frustration accompanied by the absence of residues laid down by erroneous awareness. This view is rejected since it would allow a liberated self to return to the world eventually.

The definition of liberation as the absolute absence of frustration is rejected, since absolute absence cannot be an aim in life.

(E26-28) Some say that liberation is the complete destruction of all the traces laid down by false judgments in one individual. This is rejected as not being an aim of life. The Nyāya and Vaiśeṣika systems hold that the destruction of frustration occurs at a time different from that at which those frustrations exist in the self.

Some define liberation as the destruction of preceding frustration (*caramaduḥkhadhvaṃsa*).

(E28-30) Some scholars question whether liberation is an aim of life at all. Padmanābha divides these sorts of objections into nine varieties and refutes them all.

(E30-32) Whether all selves are eligible for liberation is

then discussed. Liberation can be the chief pursuit in life only if everyone can be eligible, even if not at the same time. Thus, everybody can take steps to getting liberation for himself.

(E36-43) Padmanābha offers an elaborate discussion regarding darkness. The Bhāṭṭa school's view that darkness is an independent entity is refuted. Śrīdhara's theory that darkness has dark color superimposed on it is rejected. The Prābhākaras are said to hold that darkness is the absence of awareness of sunlight. This is rejected, since awareness is cognized by the internal organ while darkness is grasped by the visual organ. The author refers to the view of Pragalbha Bhaṭṭācārya, saying Pragalbha was respected by Padmanābha's father. Pragalbha's view is said to be that darkness is the absence of the color belonging to any brilliant light.

(E57) While interpreting the definition of individuator Padmanābha cites Udayana's definition in *Kiraṇāvalī* and criticizes it. Praśastapāda means that substance-ness, etc. can be both general and specific and that the individuator is a certain kind of specificity. Udayana believes that we come to be able to distinguish one object from another through the individuator, and so treats the individuator as a generic character of things as well as a specific one, which is inconsistent.

(E62-65) Gaṅgeśa held that *viśiṣṭābhāva* is the absence of relation, while Udayana held it to be the absence of the qualificand (*viśeṣya*). Others hold that the absolute absence of relation is *viśiṣṭābhāva*. Padmanābha disagrees. He says that the absence of qualifiers (*viśeṣaṇa*) may be taken to involve any one of the three kinds of relational absence (*saṃsargābhāva*). There is no purpose in bringing absolute absence in here. However, Udayana holds *viśiṣṭābhāva* to involve absolute absence alone, though the other kinds of relational absence find their place in his account. Padmanābha cites the treatment by Gaṅgeśa and Udayana of these points, and does not appear ready to accept Udayana's view, though he expresses his approval of parts of it.

(E65-66) Some scholars believe in an absence whose counterpositive-ness is limited by a property which has a different locus (*vyadhikaraṇadharmāvacchinnapratiyogitābhāva*). Such an absence cannot be admitted. What determines the counterpositive-ness cannot be in the same locus, and so the situation presumed in such an absence cannot occur.

(E65-67) Generic absence (*sāmānyābhāva*) must be

admitted. The alternative would require supposing that prior absence has a beginning and posterior absence an end, and that cannot be, since it would involve admitting the existence of the counterpositive or of a prior absence before that absence, and of a posterior absence after that absence, which is contradictory.

(E66-67) It is possible to imagine that several kinds of absence exist. For example, a jar may not exist on the ground through inherence at the same time as it exists there through contact. However, it is not necessary to enumerate every one of such absences, as they are implied on the strength of what is generally admitted (*abhyupagama siddhānta*).

(E67-68) Padmanābha now takes up the question of admitting additional categories. Difference (*bheda*) is not admitted as an independent category, since it is the same as mutual absence, dissimilarity, separateness and the essential nature of a thing.

(E68-69) Power (*śakti*) is shown to be of three kinds: (1) the denotative capacity of a word, (2) acquired causal efficacy (*ādheyaśakti*) and (3) natural power (*sahajaśakti*). None of these forms any part of a category.

(E69-71) Purity (*śuddhi*) and impurity (*aśuddhi*) are held by some scholars to be distinct categories. Padmanābha shows that these are only concepts with no objective entities corresponding to them. Or else they may be treated, as the Prābhākaras do, as respectively kinds of merit and demerit. But Padmanābha rejects such an interpretation, since acts which are considered to produce these things may be taken themselves to have been produced by certain varieties of *adṛṣṭa*. Again, purity may be taken to stand for the proximity to a controlling deity, impurity the reverse of that. Others take purity to consist in the relation that is produced by purifying materials like ashes which produce the appropriate traces. Padmanābha denies this on the ground that traces are not produced by ashes. Therefore purity must be admitted to be a particular kind of *adṛṣṭa* of presence of a deity, impurity the reverse of that.

(E71-74) Neither *śabdabhāvanā* nor *arthabhāvanā* is admitted as an independent category. The new school of Nyāya holds that ownership (*svatva*) is an additional category because it is distributed by its owner to others.

Momentariness cannot be an independent category, since it is sufficient to admit time as a substance.

Being qualified (*vaiśiṣṭya*) is not an added category, nor

is collection (*samūha*).

(E74-75) Following his father, Padmanābha admits as added categories the chief qualifier or pervader of the qualified (*prakāra*) and the pervaded of the qualified (*prakārin*).

(E75-77) Number is a quality, not a distinct category. Similarity (*sādṛśya*) and dissimilarity (*vaisādṛśya*) are not independent categories. Nor are intensity (*tāratva*), dullness (*mandatva*) and the relation between substratum and superstratum (*ādhārādheyabhāva*).

(E78-81) Absence is proved to be a category.

(E81-82) Suggestion (*vyañjanā*) is not an independent category. Padmanābha refers his readers to his own *Ālaṃkārabhāskara*, a *Kāvyaprakāśaprakāśa* with a refutation of it, *Ekāvalīvivaraṇa*, *Śaradāgama*, *Manoramā*, etc.

(E82-84) *Sphoṭa* is rejected as a category. The author discusses whether there should be a limiting factor to the connections between words (*saṃsargamaryādā*), and rejects that too.

(E84-87) Genders (masculine, etc.) are not independent categories. Padmanābha cites *Vākyapadīya* (Book III, 1a) and provides an elaborate discussion concerning the uses of words to indicate gender.

(E87-92) A lengthy discussion is provided on the notions of qualifier (*viśeṣaṇa*) and indicator (*upalakṣaṇa*), in which the various interpretations noticed by Vardhamāna in his commentaries on *Pariśuddhi* and *Kiraṇāvalī* are explained. Padmanābha classifies properties (*dharma*) under three headings: qualifiers, indicators and influencers (*uparañjaka*). The first is said to distinguish the property-possessor of its own accord, while the second makes known what distinguishes that object. The third gives rise to a cognition of the object to which it has imparted its color.

(E92-98) Discussion of causality, including the notion of *anyathāsiddha* and the nature of causal relations.

(E98-100) Absence-ness (*abhāvatva*), that-ness (*tattā*), this-ness (*idaṃtā*), etc. are imposed properties and not universals. Gaṅgeśa is said to have identified that-ness and this-ness, but Padmanābha disagrees with him on this point.

(E100) Padmanābha tells us that the old school admitted God's perception as an instrument of knowledge, and God as a substance.

Gaṅgeśa described inference as awareness of pervasion, while Vācaspati Miśra held it to be awareness of a the *hetu*'s being a property of the *pakṣa* qualified by pervasion, and Udayana understood it as the *hetu*'s being brought under consideration. Thus according to Gaṅgeśa and Vācaspati inference must be a quality, an awareness, while according to Udayana it is a substance, say, smoke. Likewise, Gaṅgeśa viewed testimony as awareness of similarity, etc., Vācaspati as recollection of the meanings of words, and Udayana as the similarity which comes to be known. Again, according to the first two testimony is awareness, while according to Udayana it is sound.

(E100-104) Padmanābha goes on to take up the rest of the items listed by Gautama at *Nyāyasūtra* I.1.1, bringing them under Vaiśeṣika categories.

(E104-106) The tables of categories admitted by other schools are indicated. The Bhāṭṭas admit four categories (substance, quality, motion and universal). The Prābhākaras admit eight (those four, plus number, inherence, similarity and power). Candra, representing a section of the Prābhākaras, admits eleven categories, those eight plus order (*krama*), accessory (*upakāra*) and tendency (*saṃskāra*). The author of the *Mahārṇava* (viz. Vātsveśvara) adds a twelfth category to Candra's list, namely *aupādhika*. Sāṃkhya has twenty-five categories. The Pāśupatas have five: effect, cause, contemplation (*yoga*), injunction (*vidhi*) and the end of frustrations (*duḥkhānta*). The Cārvākas accept only four categories--earth, air, fire and water. The author shows how the Prābhākaras resemble and yet differ from Vaiśeṣika.

(E106-107) The categorial scheme of Buddhism generally--five *skandhas* and the analysis of objects as bundles of qualities--is sketched, as well as the peculiar features of Vaibhāṣika, Yogācāra and Mādhyamika.

The Jain scheme is also reviewed as involving seven categories--*jīva, ajīva, āsrava, saṃvara, nirjarā, bandha* and *mokṣa*--and while dealing with them a number of Jain sects are distinguished, among them Kṣapaṇaka, Śvetāmbara, Ārhata, Nīlāmbara, Raktāmbara, Carmāmbara and Barhāmbara.

19 (E140-142) The old school of Nyāya held that the non-inherence cause is what is adjacent (*pratyāsanna*) to the inherence cause. Padmanābha notes that this does not apply to such a case as the potter's stick or wheel, which is an adjacent but not a non-inherence cause. Therefore in the formation of substances the non-inherence cause shall be taken to be the contact between the parts. In the case of production of the color

of the whole the non-inherence cause consists of those colors of the component parts which are not affected by heating.

20 (E146-147) Padmanābha quotes the passage in *Kiraṇāvalī* which sets out the six impediments to universalhood, (1) that a universal cannot belong to only one individual, (2) that it cannot range over exactly the same individuals as a different universal, (3) cross-connection, (4) that a universal cannot have a universal property, (5) that the assumption of a universal should not undermine the reasons for postulating the individual as existent, and (6) that inherence cannot be related to another inherence. Some scholars do not admit (2), (3) and (5). Padmanābha explains the reasoning of these thinkers and indicates the limits within which the six impediments should be admitted. (5) is shown not to be a separate impediment.

22 (E153) Some scholars are said to admit dispositional tendencies (*saṃskāra*) in some form or other in certain substances--e.g., impetus in earth, water, fire, air and internal organ, and some say that elasticity is present in the internal organ. Śaṃkara Miśra's *Vādivinoda* is cited here. Praśastapāda admits elasticity only as a quality of substances which have touch.

36 (E180-184) Padmanābha explains why variegated-color has to be admitted. The old school held that the color produced by several different shades of the same color must be a different color. Padmanābha admits variegated touch but not variegated smell or taste.

The color of an atom pervades the atom fully but it does not fully pervade the composite whole. The different colors in the atoms assist each other in the whole.

(E188) Padmanābha remarks that the treatment in *Guṇakiraṇāvalī* of impetus, elasticity, fluidity and other qualities is not easy to understand.

(E211) Some say that there are three kinds of qualifiers--*saṃkocaka, vikāśaka* and *anubhaya*. The fragrance in smoke illustrates the first, since it distinguishes this smoke from other smokes. An example of the second is knowability, since it first applies to a particular object and then generalizes to other like objects. Substance, smoke, etc. illustrate the third kind, since they cause neither differentiation nor generalization as such.

17 (E239-242) Some scholars hold that viscidity (*sneha*) is not a quality of water, since it is not found there but in oil. It is not a property of earth, since it isn't found in jars, etc. But it is a property of ghee, for instance. This is refuted by quoting

Udayana's arguments.

39 (E263-267) On the perceptibility of air, Padmanābha gives the *prima facie* view that it is perceptible. Some scholars reject this view on the ground that if possession of manifested touch is admitted as capable of producing perceptual awareness of air, then light, which does not have manifested touch, would become imperceptible. Others argue that if manifested color is made a condition for awareness, then the bile in the eye and its color must also be admitted as perceptible. Similarly, if manifested touch is taken as the condition, then summer's heat would also become perceptible. Therefore, both color and touch are requisite conditions for perceptual awareness, and as they are not both present in air it is not perceptible. Furthermore, they argue, manifested color is a condition for perception of substance, and manifested touch for tactual perception of a substance. Air cannot thus be perceived through the sense of touch.

Padmanābha rejects all these views. He states that the conditions of perception are (1) possession of manifested color in a substance of large (*mahat*) size, and (2) possession of manifested touch when the substance is of large size. Since these conditions are absent from air it is not perceived.

40 (|E283) Though Praśastapāda says he is describing the process of creation and destruction of the elements, he describes destruction first and takes up creation later. Padmanābha explains that this is to indicate that creation and destruction form a beginningless series, for otherwise Praśastapāda would have taken creation up first.

The dissolution of the universe is said by Praśastapāda in the text to occur at the time of Brahmā's *apavarga*. Padmanābha interprets this to mean Brahmā's liberation, and cites an authority to the effect that those who occupy the state of creator become freed from it, that is, they cease to exist. Padmanābha offers also an alternative interpretation in which the term "*apavargakāla*" means God's taking up a body other than Brahmā's--this following a tradition which holds that God take the forms of Brahmā, Viṣṇu and Rudra, etc.

(E289-290) Products of different kinds are produced from atoms of the same elemental kind. For instance, a jar and a cloth are different products, but they arise from atoms of earth. Is there pot-ness or cloth-ness in these atoms which produce respectively the jar and the cloth? Padmanābha states that there is no universal like jar-ness or cloth-ness in the

atoms. Each atom has specific qualities such as color, smell, etc., but these too are not restricted to a given atom. Now when atoms are heated they come to form dyads, *minima perceptibilia*, etc. and thus to produce (say) a jar. But the effect of heat is not uniform. When the same atom, with different specific qualities, is subjected to heat, a cloth is eventually produced. Thus the particular kind of heat it is, applied to the particular qualities of an atom at a given time, produces the particular dyads and *minima perceptibilia* which in turn eventually give rise to a jar in the one case, a cloth in the other.

41 (E313) The terms "*ākāśa*", "*kāla*" and "*dik*" are technical (*pāribhāṣika*) terms, says Praśastapāda. Padmanābha takes the word "*pāribhāṣika*" to mean a term which does not connote a particular kind of universal which accounts for the denotation of the name. He does not agree with Udayana's explanation (Udayana holds that a *pāribhāṣika* term is like a proper name--there is no reason why it denominates a specific referent other than convention). Padmanābha refers to Udayana's view as that of a "section of the school."

(E315-316) Padmanābha then discusses the reference of a statement like "here is a bird". Some hold this to refer to a substance other than *ākāśa* and which is perceived through its (blue) color. Udayana holds that the bird's presence is noted there not on account of the light there but because of the absence of limited size of the locus; *ākāśa* does not get apprehended as the locus. Padmanābha rejects Udayana's contention. What is without limited size cannot be the locus of a bird. Therefore "here" (in "here is a bird") refers to space as limited by the present time. So *ākāśa* cannot be treated as the locus of everything.

45 (E419-420) Some object that if a self has only one internal organ and it is of atomic size, then, since the self gets its internal organ through its *adṛṣṭa*, it cannot function to assist the self in sense-perception of colors, etc. Padmanābha refutes this.

(E420) Others hold that each body has five internal organs, each of atomic size and each connected with one of the five sense-organs. If all these were connected with one sense, there would be delay in the production of sense-awareness, whereas if they were all connected with all five senses all awarenesses would arise simultaneously. This argument is rejected. The order in which the awarenesses arise can be explained by keeping the number of internal organs to one and

having it be of atomic size.

Others argue thus: If the internal organ were all-pervasive, then the three states of waking, dream and deep sleep could not be accounted for. The internal organ gets connected with different channels (*nāḍī*), and that explains these different states.

(E421-422) Another objection that is brought against the admission of atomic size for the internal organ is this: When several sounds are uttered, how is a person able to apprehend the sound which he wants to pick out? Padmanābha offers the following explanation. When several sounds are heard and desire to hear is directed toward one of them, the others are not apprehended. This may occur even when there is desire to know them all but one has familiarity with only one. When many objects are known in a group by the same sense the awareness of one does not prevent that of the others from arising.

A special feat named *avadhāna* occurs when a skilled person manages to concentrate on more than one sound--or according to some, things of different senses--at one time and to reproduce them in the proper order. Padmanābha states that the different senses here are connected with the internal organ at the same time. Others hold that this is accomplished through *adṛṣṭa*.

31.90. PADMANĀBHA MIŚRA, *Ṭīkā* on Śrīharṣa's *Khaṇḍanakhaṇḍakhādya*

Manuscript citations listed at NCat V, p. 176. Cf. also CSCR 40, pp. 76-77 for information on a manuscript of part of this.

32. GOVARDHANA MIŚRA (or SŪRI or ŚUDDHI) (1579)

This author was Visvanātha Tīrtha's and Padmanābha Miśra's younger brother, and a pupil of Keśava Miśra Tarkācārya. His father's name was Balabhadra, and his mother's Vijayasurī. P. K. Gode (in Annals of the Bhandarkar Oriental Research Institute 12, 1930-31, pp. 291-293) reports that a manuscript of the *Tarkabhāṣāprakāśa* exists that was written in 1579.

32.91. GOVARDHANA MIŚRA, *Prakāśa* on Keśava Miśra's *Tarkabhāṣā*

"E" references are to the edition by Shivraj Mahadeo Paranjpe, Second edition, Poona 1917.

Summary by V. Varadachari

I (E4-5) The science which treats of knowledge of the true nature of things (*tattvajñāna*) gives rise to an awareness of a reason which produces a *parāmarśa* in the form of inferential cognition. So, the relation between this science and liberation is that of user and used, not that of cause and effect. Knowledge of the true nature of things has to be taken to produce liberation gradually through the destruction of false awareness.

Others interpret the term *tattvajñāna* as a case of *saṣṭhīpuruṣa*, i.e., a compound indicating someone who is a knower of the true nature of things. Those who know reality are the *tattva*-knowers and *tattvajñāna* is their cognition. The author rejects this on the ground that the science cannot be related to the end of life, viz. liberation.

The compound which makes up the first *Nyāyasūtra* must be taken as a reciprocal copulative compound (*itaretaradvandva*). The words in it--"*pramāṇa*", "*saṃśaya*", etc.--must be construed as plurals, since each functions without dependence on the others.

III Causality (E24) Various opinions about the non-inherence cause are mentioned. Some say that, like the word "*akṣa*" which though meaning the visual organ is used to mean other sense-organs, the word for non-inherence cause, (*asamavayīkāraṇa*), comprehends a variety of different sorts of causal factors differing from case to case. Others hold that the non-inherence cause is the relationship between the essences (*svabhāva*) of relata. Still others think it is an imposed property.

VII Testimony (E48-49) Expectancy (and fitness) belong primarily to meanings and only secondarily to words.

X Objects (E72) Impelling (*nodana*) consists in contact with a substance possessing touch, and striking (*abhighāta*) is contact with a substance possessing both touch and impetus.

Qualities (E83) Sound moves in a wavy motion resembling that of billows and waves or the buds of the *kādamba* tree. Govardhana remarks that the former applies when the motion is caused by a wind blowing in the same direction, the latter when the wind blows against the direction

the object is moving.

XIV Tenets (E94) The Nyāya school believes that the internal organ is a sense organ; this is an example of the second kind of tenet, the "doctrine peculiar to the system" (*pratitantra*). But since this doctrine is also accepted by Vaiśeṣika, Govardhana cites this as a defect in the *Tarkabhāṣā*: it must be an example rather of the third sort of tenet, called *abhyupagamasiddhānta*. In illustrating this third kind Keśava Miśra provides the doctrine of sound's being a quality, even though the Mīmāṃsakas discuss whether sound is eternal or not. Govardhana notes that this illustration too is defective. If sound's being a quality is admitted prior to the ascertainment whether sound is eternal or not then the example is open to the charge of irrelevancy (*arthāntara*), and is unhelpful. If it is helpful, then since all parties admit it it will be a case of the first kind of tenet, *sarvatantra*. Or if only one of the other parties admits it it will be *pratitantra*.

XVI *Tarka* (E96) *Tarka* leads to a conclusion contrary to that which is sought to be proved, and so helps prove that conclusion. In the case of perception that conclusion is a real thing (*vastu*); otherwise it is the result of inference. In connection with inference its role is twofold: (1) in determining pervasion, e.g., as "if smoke were not pervaded by fire then it would not be produced by fire", and (2) in scrutinizing a subject, e.g., "if the jar were there on the ground it would have been perceived as the ground is".

(E97) There are five kinds of *tarka*: self-residence, mutual dependence, circularity, infinite regress and sublation.

XVIII Discussion (E97) Objection: The definition of discussion here should include the word "only" (*mātra*) to indicate that discussion is only properly so termed when it is devoted to determining the truth.

Answer: No--the context is not one of debate at all, and thus there is no scope for such an "only". There is no provision for an arbitrator in this sort of discussion. The participants themselves judge the merits and defects of their arguments, not some third party. The participants are not partisans. However, if some third party with a neutral attitude offers his services he need not be excluded from the discussion, as his participation may help arrive at the truth.

(E97-100) The eight "rebukes" in the text are defended by Govardhana Miśra through demonstrating that six of the ways of losing an argument have no scope in discussion as

defined, and that seven are not helpful in discussion even if they might apply there. He remarks that Keśava Miśra only listed these eight "rebukes" on the basis of popular understanding prevalent at the time. He should not be misunderstood as denying that others might in some cases become relevant.

XX Cavil (E101) Sānātani held that, just as cavil is held to be an independent kind of controversy (*kathā*), so discussion (*vāda*) can also be independent. In both cases one's own position is not established. Govardhana Miśra rejects this on the ground that one who seeks to know the truth will have to establish his position also. Tarani Miśra held the view that a fourth kind of controversy should be admitted, called *vādavitaṇḍa*. Govardhana remarks that this is absurd, since there cannot be a controversy which is prompted by conflicting desires.

33. MĀDHAVA MIŚRA (1590)

Both Dinesh Chandra Bhattacarya (DCB p. 171) and Umesh Mishra (UM pp. 348-349) trace the lineage of this Mādhava Miśra. He was the son of Gadādhara Miśra (thus distinct from the author of work #17.36 of this volume) and Śrīmatī of the Sodarapura family of Mithilā; they lived in a village called Hāṭī. His father was a Vaiṣṇava as well as a *śākta*. Since a manuscript of his *Bhedadīpikā* exists dating from 1621 an estimate of his date at the end of the 16th century seems appropriate.

33.92. MĀDHAVA MIŚRA, *Bhedadīpikā*

Umesh Mishra informs us that Mādhava Miśra "has criticized the Vedāntins in it and has supported the *bhedavāda* of the Naiyāyikas", and provides us with the first few lines. The sole known manuscript of this work is said to exist in the family of Choti Jha of Mangarauni, Darbhanga. (UM p. 349)

34. GUṆĀNANDA VIDYĀVĀGĪŚA BHAṬṬĀCĀRYA (1590)

Guṇānanda was a pupil of Madhusūdana Ṭhakkura. His date is fairly clear, since there exists a manuscript in the India Office Library of his commentary on *(Guṇa)Kiraṇāvalīprakāśa* dated 1612. He was criticized by Yaśovijaya, the prolific Jain philosopher, whose life falls entirely within the seventeenth century, so that also confirms the date suggested.

34.93. GUṆĀNANDA VIDYĀVĀGĪŚA BHAṬṬĀCĀRYA, *Tātparyaviveka* on Udayana's *Nyāyakusumāñjali*

"E" references are to the edition by Mahaprabhulala Goswami, Darbhanga 1972.

Summary by V. Varadachari

1.3 (E14) The Pāśupatas referred to by Udayana as unstained by their antivedic and unworldly acts and as independent are identified by this commentator as Mahāvratīyas.

(E60) The Mīmāṃsakas are stated to hate God.

The Naiyāyikas believe that by consecration deities become present in the idol. On this, Guṇānanda writes that God does not have any doubt of feeling of self-possession (*abhimāna*), yet it must be taken to have been infused in the gods. This feeling may be fleeting and quickly destroyed, but it leaves traces which must be admitted. Guṇānanda refers to some interpretations of the word *anyeṣām* found in the text. Some hold that this word refers to those who do not believe that gods have feelings. This is rejected. Indra and others who assume such positions through deeds cannot really be gods. There is no harm in admitting this feeling there, as it cannot be sublated. Others interpret this word as referring to those who do not admit knowledge as produced.

3.10 (E414-419) On comparison there is reference to the view of one "Miśra", who held that the awareness of a thing as having similarity is the efficient cause of comparison, and that memory of the sense of the assimilative judgment causes the memory traces to arise. (This Miśra cannot be Śaṃkara Miśra, who refers in his *Nyayākusumāñjalyāmoda* to both the views that knowledge of similarity and that the known similarity is the efficient cause.) The commentator observes that the knowledge of comparison will not rise in this case. Others are stated to have held that the knowledge of similarity is the efficient cause and the knowledge of it is the activity; the recollection of the sense of the assimilative proposition offers assistance. The later ("new") school asserts that knowledge of the meaning of the assimilative proposition is alone the instrument and its recollection is activity. The knowledge of the thing's having that similarity offers assistance. Guṇānanda

remarks that the cognition of comparison can hardly arise if this view is admitted.

5.1 (E551-552) The word "*āyojana*" is taken in the sense of God's bringing the Vedas together to offer explanations of them. The word "*dhṛti*" is taken to mean retention, which is to be taken in the sense of wisdom; that is, the Vedas contain the essence of wisdom. The word "*pada*" is taken to refer to the speaker of the Vedas. "*Sandhyāviśeṣa*" are taken to refer to Kaṭha, Kālāpa and others.

34.94. GUṆĀNANDA VIDYĀVĀGĪŚA BHAṬṬĀCĀRYA, *Vivṛtiviveka* or *Tātparyasandarbha* on Vardhamāna's *Guṇakiraṇāvalīprakāśa*

See for references NCat 4, p. 155.2, which says it is a commentary on both Vardhamāna and on Raghunātha's *Dīdhiti*. See also NCat 6, p. 60a for another reference.

34.95. GUṆĀNANDA VIDYĀVĀGĪŚA BHAṬṬĀCĀRYA, *Viveka* on the *Śabda* section of Jayadeva's *Tattvacintāmaṇyāloka*

Umesh Mishra refers us to Princess of Wales Saraswati Bharati Studies 5, p. 138 for information on this. NCat VI, p. 60 cites other manuscript locations.

34.96. GUṆĀNANDA VIDYĀVĀGĪŚA BHAṬṬĀCĀRYA, Viveka the *Anumāna* chapter of Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

This work is quoted in Guṇānanda's 34.98 below.

34.97 GUṆĀNANDA VIDYĀVĀGĪŚA BHAṬṬĀCĀRYA, *Viveka* on Raghunātha Śiromaṇi's *Nyāyalīlāvatīprakāśadīdhiti*

Mentioned at NCat 6, p. 60a but no reference given. On the other hand, Anantalal Thakur (ODVS p. 321) also cites a manuscript in London.

34.98. GUṆĀNANDA VIDYĀVĀGĪŚA BHAṬṬĀCĀRYA, *Viveka* on Raghunātha Śiromaṇi's *Ātmatattvavivekadīdhiti*

See NCat 2, 48a and NCat 6, 60a for manuscript citations.

34.99. GUṆĀNANDA VIDYĀVĀGĪŚA BHAṬṬĀCĀRYA, Commentary on the *Pratyakṣa* chapter of Gaṅgeśa's *Tattvacintāmaṇi*

A manuscript of this is held in the Sarasvati Bhavana library in Banaras, according to UM p. 430).

35. GOPINĀTHA ṬHAKKURA (1590)

The colophon introducing work #100 tells us that the author Gopinātha "is the son of Bhavanātha born of the family of Somasut (Somayājin)."

35.100. GOPINĀTHA ṬHAKKURA, *Bhāvaprakāśikā* or *Ujjvala* on Keśava Miśra's *Tarkabhāṣā*

See NCat VI, 163; VIII, 118-119.

35.101. GOPINĀTHA ṬHAKKURA, *Sāra* on Gaṅgeśa's *Tattvacintāmaṇi*

A section of this work on the second book (on inference) has been edited by T. Ganapati Sastri, Trivandrum Sanskrit Seroes 35, 1914. This is our "E". The summary that follows was made by Prof. Ramanuja Tatacharya in Sanskrit, from which it was rendered into English by V. Varadachari.

The first book, on perception, is available in palm leaf in the Tanjore Library. For other references cf. NCat VI, 63; VIII, 38-39. Pandit Ganapati Sastri says that an incomplete manuscript of the fourth, *śabda*, section is available.

Summary by N. S. Ramanuja Tatacharya

(E1-2) *Saṃgati*. This section treats the connection of inference with perception which makes it pertinent to take up the former immediately after discussing the latter. Perception and inference are related to each other, the latter depending upon the former. The awareness of an inferential result depends on awareness of pervasion of the *hetu* by the *sādhya*. That awareness in turn is produced by the perceptual awareness of the co-presence of the two. Thus there is, between perception and inference, the relation of being depended upon and depending upon. Hence inference is taken up after perception, being the effect produced by perception.

Objection: The case of perception of an after-cognition of the form "I infer...." becomes a case of perception. This perception is produced by the inference through becoming its object. So perception should be taken up only after inference.

Answer: Not all perceptions depend on inferential awareness. It is only the perception we are classing as after-cognition that becomes the content of an inferential awareness. However, all inferential awarenesses depend upon perception. The relation of being the effect of perception is present in all cases which are characterized by inferential awareness. So inference is taken up after perception.

Actually, even inferential awareness produces perception. For the awareness of an apperception, etc. are produced by inference. Thus each may be the effect of the other, being interconnected. From this it does not follow that inference will have to be taken up prior to perception, for what determines what is taken up first is one's desire to treat something first and this does not depend upon interconnection. If then the question is raised as to where interconnection comes in, we answer that it is relevant only in the unitary nature of topics dealt with first and then subsequently. It is thus shown that this has no relevance to which topic is treated first.

(E2-11) These pages deal with Gaṅgeśa's D1 "An inferential awareness is an awareness produced by awareness that the qualification of the *p* by the *h* (*pakṣadharmatā*) is qualified by pervasion." Questions are raised as to the nature of the compound and the meaning of the definition.

Pakṣadhara Miśra: What is meant here is that inferential awareness is an awareness that is produced from an awareness having for its content both being qualified by pervasion and involving the *pakṣa* as the adjunct.

Objection: An awareness may at first arise of the complex awareness that light is pervaded by fire and the mountain has smoke.

36. YALLAYĀRYA (1590)

Nothing is known to us about this author except his works.

36.102. YALLAYĀRYA, *Nyāyapariśiṣṭa* on Rucidatta's *Tattvacintāmaniprakāśa*

This work is said to have been completed by his son

Viśvanātha. This Viśvānātha might well be the author of the *Ullāsa* commentary on *Bhāṣapāriccheda,* discussed on pp. 309-309. See NCat VII, 38 for manuscript citations.

37. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA (1600)

A Bengali from the traditional center of Nyāya scholars in Navadvipa, Bhavānanda's work was for some reason "not at all liked in Bengal" (H. P. Shastri, "History of Navya-Nyāya from Japanese sources", JASBe n.s. 1, 1905, pp. 177-180). Severe criticisms were apparently expressed against his work. Indeed, tradition reports Bhavānanda "was a very great Śākta and was therefore very fond of wine. He was for that reason expelled from Navadvip and then settled at Nalāhāṭi on the Ganges close to Katwa" (H. P. Shastri, ibid.). However, he appears to have received the attention of such students as Jagadīśa and Rāghavendra Bhaṭṭācārya Śatāvadhāna, the great poet and dialectician. Tradition makes Bhavānanda the pupil of Mathurānātha, but this seems unlikely, Gopinath Kaviraj argues that Bhavānanda was Raghunātha Śiromaṇi's pupil; others think he was the pupil of Kṛṣṇadāsa Sārvabhauma.

37.103. BHAVĀNANḌA SIDDHĀNTAVĀGĪŚA, *Bhavānandī* on Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

According to Umesh Mishra, manuscripts on the *Pratyakṣa* and *Anumāna* sections of this commentary are known to exist. A portion of the *Anumāna* section--up to the section on *Vyāptigrāhopāya*--is published in Bibliotheca Indica 196, 1910-12, 1963. Umesh Mishra reports that it was alternatively titled *Ṭippanī* and that it is "not very elaborate". (UM p. 427)

This work "seems to have been used more at Benares and other places outside Bengal, and was commented upon by outsiders like Kṛṣṇamitra, Dinakara and Mahādeva, and criticized by Vajrataṅka, a southerner. In fact Mahādeva distinctly alleges that the work had not been appreciated by the paṇḍits of Gaura" (Chakravarti p. 285).

37.104. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA, *Sāramañjarī* on Jayadeva's *Tattvacintāmaṇyāloka*

A manuscript of the *Pratyakṣa* portion of this sub-commentary exists in the Library of the Asiatic Society of Bengal as well as in the Raghunāthamandira library in Jammu, according to Umesh Mishra (UM, p. 428), See also NCat 8, p.

41a for other manuscript citations.

37.105. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA, *Śabdārthasāramañjarī*

The *Kārakacakra* section of this has been edited at least twice: once in the Haridas Sanskrit Series 154, 1942, with commentaries by Mādhava and Sītācārya Tripāṭhin, and in *Vādārthasaṃgraha* (Bombay 1913-14), Pt. II, and again with Rāmarudra Tarkavāgīśa's *Tattvacintāmaṇididhiti-Raudrī* and Mādhava Tarkālāṃkāra's *Mādhavī*, Calcutta 1900. Many manuscripts are cited at NCat 3, p. 373.

37.106. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA, *Arthapradīpa* on Raghunātha Śiromaṇi's *Nañvāda*

Manuscripts cited at NCat 9, p. 323b.

37.107. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA, *Sāramañjarī* on Raghunātha Śiromaṇi's *Ākhyātavāda*

"A manuscript dated 1658 Śaka is preserved in the library of the Calcutta Sanskrit Sahitya Pariṣad" (UM, p. 427) A manuscript is cited at NCat 3, p. 9b.

37.108. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA, *Lakarārthanirnaya*

A work on grammar of the Nyāya system. It was published, with a modern commentary of Vireshwara Tarkatirtha, by Ashubodha Vidyabhushana and Nityabodha Vidyaratna in 1921.

37.109. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA, *Daśalakāravicāra*

See under #37.114 below.

37.110. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA, *Karaṇatāvicāra*

See under #37.114 below.

37.111. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA, *Viṣayatāvicāra*

See under #37.114 below.

37.112. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA, *Nirvikalpavicāra*

See under #37.114 below.

37.113. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA, *Viṣayadoṣapratibādhyapratibandhakavicāra*

See under #37.114 below.

37.114. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA, *Kārakavicāra*

Manuscripts of these six works (#s 37.109-114) are found in a collection titled *Karaṇatāvicāra* held at the Calcutta Sanskrit College Library. See CSCR 36, pp. 166-170.

37.115. BHAVĀNANDA SIDDHĀNTAVĀGĪŚA, *Ṭīkā* on Raghunatha Śiromaṇī's *(Guṇa)Kiraṇāvalīdīdhiti*

Thakur, citing VNNC p. 135, says "it was discovered in Navadvīpa and it was complete in 105 fols."

38. VIDYĀNIVĀSA BHAṬṬĀCĀRYA (1600)

He was the father of Viśvanātha Nyāyapañcānana Bhaṭṭācārya, who lived around 1630, so we may estimate Vidyānivāsa's date as 1600. Gopinath Kaviraj says of him "His younger brother was Nārāyana and his father was the son of the younger brother of the great Vāsudeva Sārvabhauma and is said to have been highly honored by Rāja Mānasiṃha of Amber, and had defeated in a public scholarly assembly, at the court of Ṭodaramala, the great scholar Nārāyaṇa Bhaṭṭa of Benares." (Quoted in UM, p. 434; source not cited.)

38.116. VIDYĀNIVĀSA BHAṬṬĀCĀRYA, *Vivecana* on Gaṅgeśa's *Tattvacintāmaṇi*

According to NCat VI, 271, this work has been edited in the Bibliotheca Indica. We have been unable to find it listed there.

39. KEŚAVA BHAṬṬA (1600)

NCat V, 67 gives us a good deal of information about this writer, who is well known as a Mīmāṃsaka as well. He stems from the Laugākṣi family of Banaras, and was the son of Anantabhaṭṭa and grandson of another Keśava Bhaṭṭa. He

flourished in Central India, where he "was a protegé of the Gond King Umāpati Dalapatirāja, son of Govinda; resident of Punyastambha (modern Punatambe in Ahmadnagar District on the Godāvarī; belonged to Mādhyandina Śukla Yv." (Anantlal Thakur's Introduction to the "E" of the *Lakṣaṇāvalīprakāśa* summarized below, pp. ii-iv)....According to Anantlal Thakur, Keśava wrote his *Saptapadārthīpadārthacandrikā* in 1599.

39.117. KEŚAVA BHAṬṬA, *Prakāśa* on Udayana's *Lakṣaṇāvalī*

"E" references are to the edition by Sasinath Jha, Mithila Institute Series (Ancient Texts) 14, Darbhanga 1963.

Summary by V. Varadachari

(E1) At the very outset, there is a startling statement. While Udayana and others treat only-negative inference as the same as a definition (*lakṣaṇa*), Bhaṭṭakeśava tells us that the "only-positive" inference equals definition and that this is elaborated in the (#120) *Saptapadārthīprakāśa*. Śivāditya's work argues only for treating the only-negative inference as equal to definition. (It is not clear what made Keśava Bhaṭṭa commit himself to this statement. Could this be a case of scribal error?)

(E8) Regarding the universal water-ness (*jalatva*), Keśava Bhaṭṭa observes that the Tāntrikas do not admit universals as such. Others argue that *adṛṣṭatva* may also be a universal, because it would determine the use of the word "*adṛṣṭa*", as the word "*jala*" does.

(E26-27) Some scholars are stated to hold positive-ness (*bhāvatva*) to be an imposed property. Keśava observes that inherence-ness is an imposed property, citing the authority of the *Ratnakośa*.

Curiously enough, the last *śloka* in the *Lakṣaṇāvalī* is not cited. It is not commented on by Keśava, either.

39.118. KEŚAVA BHAṬṬA, *Nyāyacandrikā* on Gautama's *Nyāyasūtras*

The work has been edited by Surnath Kunjan Pillai in the Journal of the Kerala University Oriental Manuscripts Library 9, 1956-57, also reprinted in the University of Kerala Sanskrit Series 189, 1958.

39.119. KEŚAVA BHAṬṬA, *Tarkadīpikā* on Keśava Miśra's *Tarkabhāṣā*

Manuscript references (two, both to manuscripts held in Madras) are to be found at NCat 5, 67a.

39.120. KEŚAVA BHAṬṬA, *Padārthacandrikā* (or *Ṭippaṇī*) on Śivāditya's *Saptapadārthī*

NCat 6, p. 66b cites TD. 5983 as a Madras manuscript location.

40. YĀDAVĀCĀRYA or YĀDAVA PAṆḌITA (1600)

This author was apparently a pupil of Rāmakṛṣṇa Bhaṭṭācārya. He introduces himself as the son of Vyāsa Narasiṃha.

40.121. YĀDAVĀCĀRYA, *Sāra* or *-kutūhala* on Janakīnātha's *Nyāyasiddhāntamañjarī*

The work is edited with Jīvanātha Miśra's commentary in The Pandit n.s. 29, 1900 through 32, 1910, and reprinted in Banaras 1916, the reprint being our "E". Roman numeral headings of sections correpond to those found in the summary of Janakīnātha's *Nyāyasiddhāntamañjarī* above.

Summary by V. Varadacarya

(E2) While discussing the need to incorporate into a work the benedictory verse at the beginning, the author states that where the work is not completed, even though the invocation is provided, it must be assumed that the obstacles to its completion are either too strong or too many. Such obstacles could be removed by many invocatory verses. How can the earlier part of *Kādambarī* be completed if there are obstacles there preventing it? The obstacles do not directly prevent the completion of the work, however. Rather, the work does not get completed because of the difficulties created by the author to the king and other patrons. So *Kādambarī* was written through the period when the traces that would cause difficulties are destroyed by an invocation. Beyond that point obstructions are caused by further traces. Many invocatory verses are thus written because of apprehension that many obstacles may be there.

(E3) The new school of Nyāya holds that the destruction

of particular kinds of obstacles alone results from an invocation. The destruction of other obstacles results from the reading of *stotras* on Vināyaka and others. Completion of the work is produced by a group of conditions such as the relational absence of obstacles, etc.

1 (E6) While interpreting the text which cites Udayana's definition of an instrument of knowledge as that which consists in the experience of the object as it actually is, it is observed that experience other than error is an instrument of knowledge.

7 (E35) Concerning the relation of absential qualification (*viśeṣaṇatā*) between sense and content in a perception of an absence, the author classifies it into three kinds: (1) as self-linking connector, (2) as chief qualifier, (3) as locus.

15 (E70) While dealing with pervasion the commentator refers to the view of Saundaḍopādhyāya who admitted absence whose counterpositive-ness is limited by a property whose loci are different from its counterpositive.

17 (E79) On the role of *tarka* a passage from Udayana's *Nyāyakusumāñjali* is cited in criticism of Śrīharṣa's *Khaṇḍanakhaṇḍakhādya*.

20 (E88-90) Vaiśeṣikas hold that, e.g., the cause of inferential knowledge is the ascertainment of the presence of smoke on the mountain where smoke is qualified by the property of being pervaded. Others reject this, however, on the ground that it will not apply to the case of "The mountain has absence of fire", because no smoke is perceived there.

21 (E93) In the case of inferential awareness the internal organ alone is the cause.

21-23 (E89-99) While dealing with only-negative inference, pervasion is said to relate the absence of the *sādhya* to absence of the *hetu*. The old school held that the word "pervasion" (*vyāpti*) primarily denotes positive concomitance and that along produces inferential awareness. There is the likelihood of deviation in the case of inferential awareness arising from negative concomitance. Yādava observes that just as all kinds of positive concomitance are covered by the definition of pervasion as "existing in the same locus as the *hetu*", so also the word "*pakṣa*" means all kinds of *pakṣas* and there is nothing to cause one to think that deviation will arise in the case of inferential awareness arising from negative concomitance.

23 (E103-105) In the case of counterbalance the Ratnakośakāra held that there are two competing awarenesses

(1) of that which is pervaded by the *sādhya* and (2) of that which is pervaded by the absence of the *sādhya*, and thus there arises doubt. So, inferential awareness should be said to arise only by being in the same locus with *p*-ness as limiter. Yādava observes that in that case the after-cognition that arises will be likewise limited and so no determinate inference can occur.

24 (E122) It is stated that there are ten fallacies. The five to be added to those enumerated in the *Nyāyasūtras* are: desire to know (*jijñāsā*), doubt (*saṃśaya*), understanding possible meanings (*śākyaprāpti*), purport (*prayojana*) and rejection of doubt (*saṃśayavyudāsa*). It is claimed that these five were admitted by the old Naiyāyikas, but they are not enumerated by Gautama in *Nyāyasūtra* I.1.5.

Raghunātha Śiromaṇi's views on inference are reviewed. The third member of the inference pattern, the example (*udāharana*), does not depend upon the other members and so does not fulfil the same purpose as the other members. Of these thesis (*pratijñā*) and reason (*hetu*) go together, as do application (*upanaya*) and conclusion (*nigamana*). The mentioning of the examples along with the other four is only in connection with an account of the rise of inferential awareness.

28 (E134) The text defines word or language (*śabda*) as the cause *par excellence* of verbal knowledge (*śābdapramiti*). Yādava comments that Gaṅgeśa held that a word is produced from knowledge of the nature of the object that causes the use of it.

(E136-144) The view of the Vaiśeṣikas that verbal testimony should be included within inference and is not an independent instrument of knowledge is explained and rejected utilizing the reasoning on this topic by Udayana in his *Nyāyakusumāñjali*.

29 (E145) The Nyāya school holds that words have designative power as a result of conventions created by God. The knowledge, desire and volition of God all have to be recognized as playing a causal role here; none of them is sufficient alone. So the Mīmāṃsā school maintains that the meaning lies in the designative power (*abhidhā*) of words, and that that power is an independent category.

32 (E154-157) After an elaborate treatment of the topic of God and his body, the commentator takes up internal heat (*pāka*) as viewed by the Vaiśesika and Nyāya schools. After rejecting the view of the Vaiśeṣikas, they are cited as charging that the Nyāya theory is too complex. This is defended by

reviewing the reasoning found in Udayana's *Kiraṇāvalī*.

(E159) While offering proofs for the existence of God the commentator refers to the view of his preceptor Rāmakṛṣṇa Bhaṭṭācārya, who held that inference alone can prove God's existence and that neither perception through the senses or the mind can do so since God is not a colored substance and cannot be apprehended by others' minds.

(E160) Regarding the nature of liberation, the commentator observes that the Nyāya school admits the accounts contained in the Purāṇas such as *sālokya, sārūpya* and other kinds of liberation. If these were to lead to a return to the world then they could not be admitted to have been brought about by knowledge of reality. If there is no return then those who attain these kinds of liberation are to be taken as having obtained liberation while living. If, however, the state of liberation is intimate union (*sāyujya*) then he who attains that liberation will not return. This is the view of the Nyāya school. Others hold liberation to consist in the absorption of the self into the supreme Self, there being no subtle body. Still others hold liberation to consist in the destruction of twenty-one kinds of frustration. This is the view of the ancient Nyāya school. The six senses, six objects (of the senses), six awarenesses, pleasure, pain and body constitute these twenty-one kinds. Like the body, the self too is to be avoided, being the instrument of misery. So liberation is the absorption or destruction of the self.

(E160-163) The Sāṃkhya theory of self, matter and bondage is set forth and refuted along Udayana's lines in *Nyāyakusumāñjali*.

33 (E164-166) Designative capacity is twofold in the Mīmāṃsā school, namely *ānubhavika* and *smārika*, experienced and recollected. The former occurs in cases related to action and the latter in connection with universals. This is rejected by taking it to occur only in relation to particulars.

34-35 (E167-190) Some hold that the negative particle "*a-*" in a relational absence cannot denote a mutual absence. This is rejected on the ground of over-complexity.

(E198) In the case of the statement "there is no jar on the ground" the word "ground" is used in the locative case and so must then be treated as involving relational absence. However, in "the jar is not a cloth" the words for "cloth" and "jar" which are the counterpositives have the same case-suffix and so this is a case of mutual absence.

(E233-238) While discussing the role of fitness in giving

rise to verbal knowledge the opinion of the "new" school is stated as being that fitness consists in the absence of any obstacle of the form of apprehension of the non-relatedness between the two words.

(E248-249) While discussing the nature and scope of an injunction (*vidhi*) Yādava refers to the view of Saundaḍopādhyāya, who held that in the word *cikīrṣā* the root *kṛñ* means the desire regarding volition. This is because the suffix *-san* denotes a desire that is related to the sense of the root. So the word *cikīrṣā* the desire to get the object one wishes to use. Yādava rejects this view. If the knowledge of volition gives rise to activity by being related to the object, then the activity of cooking may as well rise from mere knowledge, since volition (here the wish to cook) is the means to get the desired object (food).

(E253) The old Naiyāyikas held that mere knowledge that volition produces a result, arising about the means of getting the desired object, may be admitted as giving rise to activity. There is no need to admit knowledge that the means leads to the result, as this produces heaviness.

(E260) Following the text, Yādava observes that the knowledge which is specified by the result to be achieved through volition gives rise to the desire specified by the result of volition. Hence that itself may be admitted as the cause of the desire to undertake the act.

(E252-278) A thorough discussion is provided expounding and rejecting the views of the two schools of Mīmāṃsā and the Grammarians.

40. 122. YĀDAVĀCĀRYA, *Kaṇādarahasyasiddhāntasaṃgraha*

Incomplete manuscript references are cited at NCat 3, p. 303b; we are told it quotes the *Dīdhiti*.

41. KṚṢṆADEVA SANMIŚRA (1605)

A native of Mithilā, Kṛṣṇadeva Sanmiśra was the father of a Bhavadeva who wrote the *Dāna(dharma)prakamyā* in 1635. Thus we can estimate Kṛṣṇadeva's date around 1605. This author seems also to have written a commentary on Patañjali's *Yogasūtras* and perhaps a *Yuktabhavadevanibandha*.

41.123. KRSNADEVA SANMIŚRA, *Naiyāyikaratnamālā*
NCat IV, p. 321, cites a manuscript of this work.

42. ŚUBHAVIJAYA GAṆI (1607)

This writer was a Jain author, who wrote a *Syādvādabhāṣā* on Vādideva's *Pramāṇanayatattvāloka*. NCat VIII, 121 informs us that his *Tarkabhāṣāvārttika* was "written in 1607 A.D. and revised by Padmasundara in 1609 A.D."

42.124. ŚUBHAVIJAYA GAṆI, *Vārttika* on Keśava Miśra's *Tarkabhāṣā*

A manuscript is extant in Baroda. J. S. Jetly, in an article in the Proceedings of the All-India Oriental Conference 20.2, 1959, p. 20 says Śubhavijaya "wrote his *Vārtika* on *Tarkabhāṣa* in VS 1663 (1607 A.D.). From the colophon of the Ms., we know that he was a pupil of Hīravijayasūri who was honoured by the Moghal Emperor Akbar. His *Vārtika* was revised by Padmasāgaragaṇi in VS 1665 (1690 A.D.)."

Jetly notes: (p. 21) "a peculiarity of Śubhavijaya's method. He introduces the subject to the beginner by explaining first the useful definitions of some technical words like *avyāpti, ativyapti, asambhava, anvayavyabhicāra, vyatirekavyabhicāra, asādhāraṇadharmatva, yathārthajñāna, viśeṣaṇa, upalakṣaṇa* and *anyūnānatiriktadharmāvacchedakatva*. In his explanation he uses the easiest language possible...generally commentators leave this work to the teacher. Śubhavijaya is an exception to this."

43. VIŚVANĀTHA (1610)

The author of the *Ullāsa* commentary on *Siddhāntamuktāvalī* has received a lot of attention, since it appears to be the earliest commentary on that work and given the dispute (noted elsewhere) about who the author of *Siddhāntamuktāvalī* actually was and what his date. There is a manuscript of the *Ullāsa* dated 1533 *śaka*, which is 1611 A.D., "available at Puna Library (No. 301 of 1895-1902)....[This] Ullāsakāra in some places quotes earlier explanations and notes one or two different readings of serious nature in the *Muktāvalī*...*Raudri* commentary (written by Rudra Tarkavāīśa) was written in the first quarter of the seventeenth century ...Rudra explained [a] new reading of *Muktāvalī* and from this

it is evident that Viśvanātha, the writer of *Ullāsa*, who explained the ancient reading, was not too close to Rudra in time. *Ullāsa*, therefore, must have been composed between A.D. 1575 and 1600. *Ullāsa* leaves the evidences that there were other commentaries also. So *Muktāvalī* cannot have been composed later than A.D. 1550. We know that Viśvanātha Nyāyapañcānana wrote...in...1634 which was his old age." (Thakur, pp. 339-340)

But as we saw earlier, none of this is puzzling provided we recognize that Viśvanātha Nyayāpañcānana was not the author of *Muktāvalī* at all. As was argued earlier, the author of *Siddhāntamuktāvalī* on *Bhaṣapāriccheda* was rather Kṛṣṇadāsa Sārvabhauma Bhaṭṭācārya who was writing in the mid-16th century (see author #34 above).

One may conjecture that it is possibly this Viśvanātha who completed Yallayārya's *Tattvacintāmaṇiprakāśa-Nyāyaparijāta*; see above, pp. 298-299). He may also be the "Yallu Bhaṭṭa", #1068 in EnInPh, Bibliography, who wrote an *Upanyāsa* on Gaṅgeśa's *Tattvacintāmaṇi*.

43.125. VIŚVANATHA, *Ullāsa* on Gunānanda Vidyavāgīśa's *Siddhāntamuktāvalī*

See three paragraphs above for reference to a manuscript location.

44. (BHĀVA) GAṆEŚA DĪKṢITA (1610)

He is identified in the Sāṃkhya volume of this Encyclopedia, p. 413, as a direct disciple of Vijñānabhikṣu, who flourished in the latter half of the sixteenth century. Thus we may estimate Gaṇeśa Dīkṣita's date as about 1610. His father was named Govinda Dīkṣita, according to NCat V, 272.

44.126. GAṆEṢA DĪKṢITA, *Tattvaprabodhinī* on Keśava Miśra's *Tarkabhāṣā*

NCat 6, p. 121b says this work was "written in 1607 A.D. and revised by Padmasundara in 1609 A.D.", and gives manuscript locations.

45. DHARMARĀJĀDHVARĪNDRA (1615)

The author of a very well-known Advaita work, the *Vedāntaparibhāṣā*, he wrote several Nyāya commentaries.

Gopinath Kaviraj and Umesh Mishra both report the names of his residence and teacher. He appears to have lived in a village on the bank of the Narmada river in Tanjore district. His teacher was named Veṅkaṭanātha and his teacher's teacher (*paramaguru*) is said to have been Nṛsiṃha Yati, whom Gopinath Kaviraj tentatively identifies as the author of the *Bhedadhikkāra*. NCat VIII, 37 gives the name of his father as Trivedī Nārāyaṇa Yajvan, and NCat 10, p. 271 further makes him a member of the Kauṇḍinyagotra and a resident of a village named Kandramāṇikkam. Estimates of his date vary.

45.127. DHARMARĀJADĪKṢITA, *Nyāyaratna* on Śaśadhara's *Nyāyasiddhāntadīpa*

A copy of this work is present in the Tanjore collection. (UM, p. 476; GK, p. 85). Other manuscript locations are listed at NCat 10, p. 271b.

45.128. DHARMARĀJADĪKṢITA, *Tarkacūḍāmaṇi* on Gaṅgeśa's *Tattvacintāmaṇi*

While both Gopinath Kaviraj and Umesh Mishra seem certain Dharmarāja wrote such a work, no manuscript of it appears in NCat.. However, some of the manuscripts listed in NCat 8, p. 37b under this title but identifying it as a commentary on Rucidatta may well be portions of this work.

45.129. DHARMARĀJADĪKṢITA, *Vivṛti* on Rucidatta's *Tattvacintāmaṇiprakāśa*

As remarked above, there is a confusion between this work and the previous one. The entries under NCat 8, p. 37b need to be reexamined to clear the matter up.

46. ANNAMBHAṬṬA (1620)

A prolific author, Annambhaṭṭa wrote a number of works on Advaita and Pūrvamīmāṃsā as well as on Grammar. NCat provides the names of his father, Tirumalācārya of the Rāghava Somayāji family of Andhra, a younger brother named Sarvadeva, and two teachers, Brahmendra Sarasvatī and Śeṣa Vireśvara. He is, of course, the author of that most-used of Nyāya introductory works, the *Tarkasaṃgraha* and the commentary *Dīpikā* upon it, along with a number of other works only available in manuscript at this point. His date may be estimated as including 1625 A.D.

Anantalal Thakur (ODVS pp. 351-354) estimates Annambhaṭṭa's time as after that of Gadādhara, but for a reason that does not carry much conviction, which is that there is a story that Annambhaṭṭa taught Gadādhara's work in college, deriving "support from another tradition, according to which the *Tarkadīpikā* was specially composed for the use of those who could not understand Gadādhara's larger work and came to be called *Bāla-gādādharī* on account of its being an epitome of the erudite commentary of the great schoolman." The stories hardly prove much about the actual Annambhaṭṭa's time, and Thakur himself is unconvinced by other such statements in R. B. Godbole's *Dictionary of Modern History of India* which he spends several paragraphs refuting. It is to be noted that Thakur himself, on p. 351 of ODVS, ascribes Annambhaṭṭa to the fifteenth century (!), though on the next page going on to call him " a comparatively modern writer".

Annambhaṭṭa appears to have written several works on the philosophy of other systems, including Grammar, Mīmāṃsā and Vedānta. See Thakur, ODVS pp. 352-353 for a discussion, and consult the EnInPh Bibliography under #1014 for information on other works of Annambhaṭṭā's.

46.130. ANNAMBHAṬṬA, *Tarkasaṃgraha*

Summary by Karl H. Potter

"ET" refers to the edition and translation by Gopinath Bhattacarya, Calcutta 1976. The work has been edited many times and translated many times. For Annambhaṭṭa's own commentary on his work see the summary under 46.131 below.

1 (ET1) Offering his respects to God and saluting his *guru*, the author writes this work as an easy introduction for beginners.

2 (E2; T13) The standard seven Vaiśeṣika categories are listed.

3 (E2; T18) The nine substances are listed.

4 (E3; T34) The twenty-four qualities are listed.

4 (E3; T37) The five motions are listed.

6 (E3; T39) Universals are of two kinds--higher (*parā*) and lower (*aparā*).

7 (E3; T40) There are an infinite number of individuators; they reside in the eternal substances.

8 (E4; T41) There is only one inherence.

9 (E4; T42) The four kinds of absence are listed.

10 (E4; T42-43) Discussion of earth. It has smell. It can be divided into eternal (atoms) and non-eternal (products, *kārya*). Again, it can be divided into three varieties: bodily (our bodies), sense-organ (the sense of smell, located at the tip of the nose), and objects (stones, etc.).

11 (E3; T61) Discussion of water. It has cold touch. It can be divided into eternal (atoms) and non-eternal (products). Its three kinds are: bodily (in the realm of Varuṇa), sense-organ (the organ of taste, located at the tip of the tongue) and objects (rivers, etc.)

12 (E5; T63) Fire (or light, *tejas*) discussed. It has hot touch. It is of the two kinds, eternal and non-eternal, as previously. Its three kinds are: bodily (in the realm of Āditya), sense-organ (the organ of vision, located in the pupil of the eye), and objects (of four kinds: earthly, viz. fire; heavenly, viz. lightning, which is stimulated by water; intestinal, viz. the digestive fire which transforms what is eaten; and mineral, viz. gold etc.

13 (E5-6; T68) Air has touch but no color. It is of the previous two kinds. Its three divisions are: bodily (in the realm of Vāyu); sense-organ (the organ of touch pervading the whole body); and objects (that which causes trees to shake, viz. wind, as well as the life-breath (*prāṇa*) inside the body, which goes under various names of "*prāṇa*", "*apāna*", etc. due to imposed properties.

14 (E7; T84) *Ākāśa* discussed. It is single, all-pervading and eternal.

15 (E7; T86) Time is the cause of usages such as "past", etc. It is single, all-pervading and eternal.

16 (E7; T88) Spatial direction (*dik*) is the cause of usages such as "east", etc. It is single, all-pervading and eternal.

17 (E7; T89) The self is the locus of awarenesses. It is of two kinds: the higher self (*paramātman*) and the lower self (*jīvātman*). There is only one self of the former sort: the omniscient God. Lower selves are different in different bodies, all-pervading and eternal.

18 (E8; T103) The internal organ is the instrument of the immediate awareness of pleasure, etc. There are innumerable internal organs, each corresponding to one self. It is atomic in form and is eternal.

19 (E8; T109) Color is the quality which is apprehended

only by the visual organ. It has seven kinds: white, blue, yellow, red, green, reddish-brown and variegated. It occurs in earth (all seven varieties), in water (white, not bright), and in fire (white, bright).

20 (E9; T117) Taste is the quality apprehended by the sense of taste. It has six kinds: sweet, sour, saline, pungent, astringent and bitter. It occurs in earth (all six kinds) and in water (sweet only).

21 (E9; T120) Smell is the quality apprehended by the sense of smell. It is of two kinds: fragrant and non-fragrant. It occurs in earth.

22 (E9; T120) The four qualities beginning with color (just enumerated) are produced by "cooking" (*pākaja*) in earth and are non-eternal. In the other three substances they may or may not be produced by cooking, and may be either eternal or non-eternal, depending on whether their locus is eternal or non-eternal.

24 (E10; T127) Number is the cause of the use of the term "unity" (*ekatva*), etc. it occurs in all nine substances. Its varieties run from unity to *parārdha* (a very large number). Unity is non-eternal in non-eternal substances, eternal in eternal substances. The numbers from duality on up are always non-eternal.

25 (E10; T129) Dimension is the specific condition (*asādhāraṇakāraṇa*) for the use of terms of measurement. It occurs in all nine substances. It has four kinds: small (*aṇu*), large (*mahat*), long (*dīrgha*) and short (*hrasva*).

26 (E10; T132) Separateness is the specific condition of the usage of terms like "separate" (*pṛthak*). It occurs in all substances.

27 (E10; T133) Contact is the cause of the usage of the term "in contact". It occurs in all substances.

28 (E11; T133) Disjunction is the quality which causes the destruction of contact. It occurs in all substances.

29 (E11; T136) Farness and near-ness are respectively the specific conditions for the use of the expressions "far" and "near", as well as "before" and "after". They occur in earth, water, fire, air and internal organs. They are of two kinds: spatial and temporal. The spatial farness belongs to an object that is far off spatially; spatial near-ness to one nearby in space. The temporal "farness" belongs to an earlier time; temporal "near-ness" to a later time.

30 (E11; T138) Weight is the non-inherence cause of a

thing's beginning to fall. It occurs in earth and water.

31 (E11; T139) Fluidity is the non-inherence cause of flowing (*syandana*). It occurs in earth, water and fire. Its kinds are two: natural (*sāṃsiddhika*) and induced (*naimittika*). The natural kind occurs in water; the induced in earth and fire. The fluidity in earthy substances like ghee, etc. is due to contact with fire, as well as that in a fiery substance like gold, etc.

32 (E12; T140) Viscidity is the quality which causes the lumping together (*piṇḍībhava*) of lime and other substances. It occurs in water.

33 (E12; T141) Sound is the quality apprehended by the auditory organ. It occurs only in *ākāśa*. It has two kinds: tones (*dhvani*) and syllables (*varṇa*). The former is found in drums, etc. the latter in languages like Sanskrit, etc.

34 (E12; T143) Awareness (*jñāna, buddhi*) is the quality which is the cause of all usage (*vyavahāra*). It has two kinds: memory (*smṛti*) and experience (*anubhava*).

35 (E12; T145) Memory is awareness produced from traces (*saṃskāra*) alone.

36 (E13; T148) Any awareness different from memory is experience. It has two kinds: veridical (*yathārtha*) and non-veridical (*ayathārtha*).

37 (E13; T148) A veridical experience is one which has *x* for its chief qualifier when its qualificand has *x*. This kind of experience is called true awareness (*pramā*).

38 (E13; T132) A non-veridical experience is one which has *x* for its chief qualifier when its qualificand has absence of *x*.

39 (E13; T154) True awareness is of four kinds: perception, inference, comparison and verbal testimony. Its causal condition *par excellence* is of four kinds as well: perceptual, inferential, comparative and by testimony.

40 (E13; T155) A specific causal condition (*asādhāraṇakāraṇa*) is a causal condition *par excellence*.

41 (E13; T156) A cause is that which occurs uniformly (*niyata*) prior to the occurrence of the effect.

42 (E14; T164) An effect is the counterpositive of a prior absence.

43 (E14; T165) There are three kinds of causes. That inhering in which an effect arises is an inherence cause, e.g., threads are the inherence cause of the cloth, and the cloth of its color and other qualities. A non-inherence cause is that cause which inheres in the same object as the effect or its (inherence)

cause, e.g., the contact of the threads is the non-inherence cause of the cloth, or the color of the threads is the non-inherence cause of the color of the cloth. An instrumental cause is different from the other two, e.g., the weaver's shuttle or his loom where the cloth is the effect.

44 (E14; T168) Among these three, only a non-inherence cause can be a cause *par excellence*.

45 (E13; T168) The cause *par excellence* of perceptual awareness is (the instrument of knowledge) perception .

46 (E15; T168) Perception is that awareness that is produced by the relation of a sense-organ to an object. It is of two kinds: construction-free and construction-filled.

47 (E15; T170) Construction-free awareness is that awareness which is without a chief qualifier (*niṣprakāraka*). Construction-filled awareness is awareness which has a chief qualifier, e.g., the awareness "that is Ḍiṭṭha", "that is a Brahmin", "that is black".

48 (E15-16; T176-177) The six kinds of sense-object contact are explained following classical Nyāya theory (as in, e.g., Uddyotakara).

49 (E16; T189) The cause *par excellence* of inferential awareness is (the instrument of knowledge) inference. Inferential awareness (*anumiti*) is awareness produced from consideration. Consideration is awareness of a *pakṣa* as having something (viz. a *hetu*) qualified by being pervaded (by the *sādhya*). E.g., the awareness "the mountain has smoke pervaded by fire" is the instrument of knowledge for the inferential awareness "the mountain has fire".

50 (E17; T200) Pervasion is regular concomitance, e.g., "where there is smoke, there there is fire".

51 (E17; T204) The presence of the pervaded *hetu* in (the *pakṣa*) mountain (in the above inference) is the qualification of the *pakṣa* by the *hetu* (*pakṣadharmatā*).

52 (E17; T205) Inference (the instrument of knowledge) is of two kinds: for one's own sake and for another's sake. The former is the cause of one's own inferential awareness. Thus when a person has become aware through repeated experience of kitchens, etc. of a regular concomitance between smoke and fire, and then he sees a mountain with fire rising from it, he suspects that there is fire there and remembers the pervasion between smoke and fire. From this arises an awareness that the mountain has smoke which is regularly associated with fire, and this awareness is termed "consideration" (*liṅgaparāmarśa*).

Finally, from consideration arises the awareness that the mountain has fire.

53 (E18; T2176) When one has already inferred fire from smoke and then uses the five-membered argument form intending to convince others, that is inference for others. The five members are illustrated and identified by name.

54 (E18; T221) The cause *par excellence* of both kinds of inference is consideration alone; thus, it is consideration that constitutes (the instrument of knowledge) inference.

55 (E19; T226-227) There are three kinds of *hetu*: only-positive, only-negative, and positive-negative. These are explained.

56 (E19-20; T238) The *pakṣa* is that which is suspected to have the *sādhya*, e.g., the mountain suspected to have fire where smoke-possession is the *hetu*. The *sapakṣa* is a thing which is known to possess the *sādhya*, e.g., a kitchen. The *vipakṣa* is a thing which is known to possess the absence of the *sādhya*, e.g., a lake.

57 (E20; T244) There are five fallacies of the reason deviation, contradiction, counterbalanced, unproved and sublated.

58 (E20; T246-247) (1) Deviation (*savyabhicāra*) is also termed *anaikāntika*. It has three kinds: (a) too-general, (b) too-specific and (c) inconclusive. (1a), too-general deviation, occurs, e.g., in "the mountain has fire, because it is an object of knowledge": the *hetu* is too wide, applying to the lake, e.g., where there is absence of fire. (1b), the too-specific deviation, is that *hetu* which is absent from all *sapakṣas* and so is too specific--only characterizing the *pakṣa* itself--e.g., "sound is eternal because it has sound-ness", since the only thing that has sound-ness is sound itself. (1c), the inconclusive deviation, is that *hetu* which has no *sapakṣa* or *vipakṣa*--e.g., "everything is momentary, because it is an object of knowledge": since the *pakṣa* is all things there is nothing other thing to constitute a *sapakṣa* or *vipakṣa*.

59 (E20; T251) (2) The contradictory reason is one whose *hetu* is pervaded by the absence of the *sādhya*. E.g., "sound is eternal, because it is an effect", since being an effect is pervaded by the absence of eternality, that is to say, by non-eternality.

60 (E20-21; T252) (3) The counterbalanced reason is that where there is a different reason which proves the absence of the *sādhya*. E.g., "sound is eternal, because it is audible"; here one might counterpose "sound is non-eternal, because it is an effect".

61 (E21; T234) (4) The unproved reason is of three kinds: (a) *āśrayāsiddha*, (b) *svarūpāsiddha*, (c) *vyāpyatvāsiddha*.

62 (E21; T234) (4a) An *āśrayāsiddha* reason occurs in the following example: "the sky-lotus is fragrant, because it is a lotus, like a lotus grown in water". Here something which does not exist is the *pakṣa* in the inference. (4b) A *svarūpāsiddha* reason occurs here: "sound is a quality, because it is visible, like color". Here the *hetu*, visibility-possessing, does not occur in the *pakṣa*.

63 (E21; T257) (4c) A *vyāpyatvāsiddha* reason is where the *hetu* occurs with an obstruction (*upādhi*). An obstruction is something that pervades the *sādhya* but does not pervade the *hetu*. To pervade a *sādhya* is to be the counterpositive of an absolute absence which has the same locus as the *sādhya*. Not to pervade the *hetu* is to be the counterpositive of an absolute absence which resides in what possesses the *hetu*. For example, "the mountain has smoke, for it has fire"--here an obstruction is wet fuel, since where there is smoke there is contact with wet fuel, while it is not the case that where there is fire there is fire there is contact with wet fuel (e.g., in a red-hot iron ball).

64 (E22; T262) (5) The sublated reason occurs when the absence of the *hetu* is proved by another instrument of knowledge to reside in the *pakṣa*. E.g., "fire is not warm, because it is a substance" is sublated, since warmth is known to be present in fire through perception.

65 (E65; T269) The cause *par excellence* of a comparative awareness (*upamiti*) is the instrument of knowledge called comparison. A comparative awareness involves awareness of the relation between a designating expression (*saṃjñā*) and what it designates (*saṃjñin*). The cause *par excellence* of this awareness is an awareness of similarity (*sādṛśya*). The example of the person who learns what "*gavaya*" means is repeated.

66 (E22; T273) The instrument of knowledge called "verbal testimony" consists of the statement of an authority. An authority is one who describes things as they actually are. A statement is a collection of words, e.g., "bring the cow". A word is what has designative power. This power is God's will in the form "by this word such-and-such is to be understood".

67 (E24; T302) The causes of understanding a statement are three: expectancy, fitness and proximity. Expectancy is the inability of a word to produce, without another word's

occurring, a direct awareness of what it is capable of signifying. Fitness is the absence of sublation among things signified (by the words in a sentence). Proximity is the utterance without delay of the words in the sentence. E.g., an example of a sentence violating the requirement of expectancy is "a cow a horse a man an elephant"; of violation of fitness "he waters with fire"; of proximity the uttering of "bring" now and "a cow" a long time afterwards.

68 (E24; T306-307) A statement may be of two kinds: Vedic and ordinary. Vedic statements are all authoritative, since they are produced by God. Ordinary statements are authoritative if they are spoken by an authority; otherwise not. Awareness of the meaning of a statement is termed "verbal awareness" (*śabdajñāna*). Its cause *par excellence* is (verbal) sound.

70 (E26; T347) Non-veridical experience is of three kinds: doubt, error and *tarka*.

71 (E26; T347) Doubt is the awareness of the presence in a single entity of diverse incompatible features, e.g., "it's (either) a post or a man."

72 (E26; T350) Error is false awareness, e.g., "this is silver" in reference to a shell.

73 (E26; T351) *Tarka* is the imposition (*āropa*) of a pervader through imposition of what it pervades, e.g., "if there were no fire, then there would be no smoke".

74 (E27; T354) Memory is also of two kinds: veridical and non-veridical. Veridical memory is produced by veridical experience, non-veridical memory by non-veridical experience.

75 (E27; T355) Satisfaction is what everybody feels is good for him (*anukūla*).

76 (E27; T357) Frustration is what everybody feels is not good for him (*pratikūla*).

77 (E27; T358) Desire (*icchā*) is passion (*kāma*). Aversion is antipathy. Effort is doing (*kṛti*).

78 (E27; T358) Merit is what is produced by a prescribed act. Demerit is what is produced by a prohibited act.

79 (E27; T359) The eight qualities beginning with awareness are the specific qualities of selves. Awareness, desire and effort are eternal in God, non-eternal in ordinary selves.

80 (E27; T360) There are three kinds of dispositions (*saṃskāra*): inertia, traces and elasticity. Inertia occurs in earth, air, fire, water and internal organs. A trace is what is produced by experience and produces memory, and occurs only in selves.

Elasticity is what restores something to its original state after it had changed its state, and occurs in earthy substances like a rolled-up mat, etc.

81 (E27-28; T364) Motions are explained in standard fashion.

82 (E28; T365) A universal property is eternal, single, and located in more than one thing. Universals reside in substances, qualities and motions. The highest universal is existence (*sattā*)'; lower ones are substance-ness, etc.

83 (E28; T368) Individuators reside in eternal substances and function as differentiators.

84 (E28; T369-370) Inherence is the eternal relation. It resides in things that are inseparable, i.e., pairs of things of which one, until its destruction, occurs only as located in the other. E.g., whole and parts, quality and substance, motion and moving locus, universal and particular, and individuator and eternal substance are pairs of inseparables.

85 (E28; T374) Prior absence has no beginning but has an end, e.g., the absence of an effect before its origination.

86 (E29; T378) Posterior absence has a beginning but no end, e.g., the absence of an effect after its origination.

87 (E29; T380) An absolute absence persists through the three parts of time and has a counterpositive which is limited by a relation, e.g., "there is no pot on the ground".

88 (E29; T385) Mutual absence has a counterpositive which limited by the identity (*tādātmya*) relation. E.g., "the pot is not the cloth".

90 (E30; T403) Everything falls under one or another of the seven categories.

94 (E32; T425) Colophon.

46.131. ANNAMBHAṬṬA, *Dīpikā* on his own *Tarkasaṃgraha*

Summary by Karl H. Potter

"E" and "T" references are to the edition with translation by Gopinath Bhattacarya, Calcutta 1976. As far as we are aware it is the only complete translation to date. Section numbering corresponds to the sections of the preceding summary of the 46.130. *Tarkasaṃgraha*.

1 (E1-2; T1-12) The God invoked is identified as "with

the mother" and as one who instructs in all the branches of knowledge.

An invocation is an auspicious act intended to produce unobstructed completion of a work. That it is enjoined by scripture is inferred from the practice of reliable people (*śiṣṭa*).

Objection: An invocation is not a means to completion, since there are works like (Bāṇabhaṭṭa's) *Kādambarī* which have an invocation and are incomplete, as well as works like (Udayana's) *Kiraṇāvalī* which are complete but lack an invocation.

Answer: No. In *Kādambarī* the incompleteness is due to there being too many obstacles, while in *Kiraṇāvalī* the invocation was made but not included in the book.

Objection: There is no proof that an invocation is enjoined.

Answer: An invocation is enjoined by the Vedas, because it is the object of non-ordinary and irreproachable practices of reliable persons, like the sacrifices performed on the new-moon day, etc. "Non-ordinary" excludes ordinary acts like eating, etc. which are not enjoined in the Vedas, while "irreproachable" excludes e.g. *śraddhā* performed at night (which is not approved in scripture).

2 (E2; T13) The text says there are seven categories to preclude a larger number.

Objection: Is an added category validly known or not? If it is, it can't be denied, and if it is not validly known, since its absence must therefore be validly known, it follows that the counterpositive of that absence is known, so it must be admitted after all!

Answer: No. The point is to say that category-ness (*padārthatva*) is pervaded by being one of the seven kinds of entity starting with substance.

Objection: To be one of the seven is to be not different from anything other than one of the seven, and since being different from one of the seven isn't already established, neither can being one of the seven be already established.

Answer: No. What is meant by "being one of the seven..." is having the absence of the seven differences like difference from substance, etc.

3 (E2-3; T18-28) Objection: Darkness is a tenth substance. It is the locus of black color, and it moves.

Answer: No, darkness is the absence of light. It is apprehended visually without the aid of light, unlike colored substances which require the presence of light for their perception.

Under-pervasion, over-pervasion and impossibility are the faults in a definition. A definition which avoids these faults specifies a peculiar property of the thing to be defined. This peculiarity (*asādhāraṇya*) consists in the property's having the same locus as the limiter of the *definiendum* (*lakṣyatāvacchedakasamaniyata*). The function of a definition is not merely to differentiate the *definiendum*, for if it were so then e.g., "awareness of the difference of the *definiendum* from what is other than itself" would constitute a satisfactory definition, whereas in fact awareness is not a property of a defining attribute. So if this were the sole function of the definition one would have to add a clause excluding such awareness from being a *definiens*. But if we understand a defining attribute as not merely differentiating but also determining linguistic usage this difficulty is overcome, since the awareness of the difference of the *definiendum* from what is other than itself is required to determine linguistic usage.

Now the proper definition of substance is possession of a quality, which in turn means the property of having a proper universal which is different from existence and has a common locus with a quality (*guṇasamānādhikaraṇasattābhinnajātimat*). Thus a substance at the first moment of its existence, before it gets its qualities, or if it is destroyed the moment it emerges, still is a substance by the definition as explained.

Objection: Even so the definition over-extends to include color, etc., since we speak of a "single color separate from taste" and so imply that the color possesses a proper universal which is other than existence and has a common locus with color--such a universal as single-ness ("one" color) or separateness, which are accounted qualities in Vaiśeṣika.

Answer: No, for we can explain the usage in question through the relation of having the same locus, i.e., that single-ness, separateness and the color in question all reside in the same substance.

10 (E4; T43-44) Objection: A substance produced from components some of which are fragrant and some not will be without smell, so the definition of earth as having smell under-extends.

Answer: No, for there is no such thing as variegated smell, and one can perfectly well smell the components' fragrance or non-fragrance.

Objection: A pot which is destroyed as soon as it is produced (and therefore has no qualities at all, and so no smell) will not be a substance on the definition offered.

Answer: Yes it will, for "having smell" has to be understood as meaning having a universal which is lower than substance-ness and which has the same locus with smell.

Objection: Water smells sometimes.

Answer: Yes, but it is found by experiment (positive and negative concomitance) that water smells only when it is mixed with earth and not otherwise.

Objection: Since time is the locus of everything all definitions (including this one) over-extend to include it.

Answer: No, the definition of earth is intended to apply to cases where the *definiens* is related to the *definiendum* in a relation other than that which determines a thing as being a universal locus.

To be "eternal" is to have the property of not being the counterpositive of a posterior absence. To be "non-eternal" is to be the counterpositive of a posterior absence.

A "body" is what is the locus of affective experiences for the self. A "sense-organ" is what is not the locus of a manifest specific quality other than sound, but is the locus of that contact with the internal organ which is a cause of awareness. An "object" (in the sense employed here) is what is neither a body nor a sense-organ.

11 (E5; T61) Objection: A stone may have cold touch--is it then water?

Answer: The cold touch of the stone is because of its contact with water.

12 (E5; T63-64) Objection: Gold is earthy, because it is yellow and heavy, like turmeric.

Answer: No. Ghee loses its fluidity when fire is applied to it, but gold does not do so, so it is not earthy. Since it has induced fluidity it isn't water, and since it has color it isn't made of air. So by elimination it must be fiery. We do not apprehend its hot touch and bright-white color because those qualities are suppressed by the touch and color of the earthy substance that is in contact with it.

13 (E6; T68-69) The imposed properties which differentiate the names that breath goes under are identified as different places within the body.

Air is to be inferred from the neither-hot-nor-cold touch of wind, which touch is a quality and requires a substance as its locus. That substance can't be water or fire because the touch is of the wrong kind; it is not earth, since an earthy object with manifested touch also has manifested color; and it is not any of the four ubiquitous substances since then the touch would be found everywhere; and it is not the internal organ since that is atomic and intangible.

Objection: Air is perceived, because it is the locus of a perceived touch, like a pot.

Answer: No, because there is the imposed property possessing manifest color, i.e., because not all loci of perceived touch are perceptible, but only those which also have manifested color.

Objection: If this is so, then fire cannot be perceived in hot water.

Answer: Just so, it can't be perceived (it is only inferred).

(E6-7; T77) The process of composition of the four kinds of gross elements (*mahābhūta*) is described, as well as their destruction. Destruction proceeds from the atoms being separated, which produces the destruction of the dyad, etc. The destruction of the dyad, according to the old school, is due to the destruction of the non-inherence cause (viz. contact), while the destruction of the *minimum perceptibilium* is due to the destruction of its inherence cause, viz. the (three) dyads. But the new school holds that all such destructions are due to the destruction of the non-inherence cause.

Proof of the existence of atoms is offered in standard fashion.

Proof that the universe is created and destroyed is provided by *Ṛgveda* 10.190.3, which tells us that the Lord made the sun and the moon in conformity to what had existed previously.

14 (E7-8; T89-90) Objection: What is the proof of God? He can't be perceived, being colorless and not being an internal quality like color. And there is no valid *hetu* to prove Him, nor any testimony.

Answer: The proof is this inference: "A dyad of earth and such things are produced by an agent, because they are effects, like a pot". Here, an agent is defined as one who has immediate awareness of the material cause of the effect, has the desire and the will to produce it.

God's omniscience is proved by His having immediate awareness of all atoms, etc. and because of scriptural authority.

Objection: Since we say "I am a man", "I am a Brahmin",

etc. just when a body is perceived, the self is the body.

Answer: No, since then when a hand or foot is destroyed the self will also be destroyed. Furthermore, the self can't be a sense-organ, because we recognize by one sense-organ objects that were cognized by another.

There are different selves in each body since there is variety of pleasures and pains there. And the self cannot be minute, for then it could not experience pain or pleasure extending over the whole body. Nor can it be of medium size, for then it would be non-eternal, and this would produce problems about karma, to wit, that a person would not persist long enough to work off his karma, and that a person would be visited with pains and pleasures unmerited by him.

18 (E8; T103) Objection: The internal organ is ubiquitous, because it is an intangible substance, like space.

Answer: No. If the internal organ were ubiquitous, then there would be no non-inherence cause for the contact of self and internal organ, and a self could never be without awareness.

Objection: Well then, let both self and internal organ be ubiquitous.

Answer: Then there would be no dreamless sleep, since both self and internal organ would exist everywhere and always, even in the "heart" where the internal organ is said to retire during dreamless sleep.

19 (E8; T109-110) Objection: The "variegated-color" is really just a collection of non-locus-pervading colors.

Answer: No, since color is always locus-pervading.

Objection: Then it must be the case that we perceive the colors of the threads in a variegated-colored cloth.

Answer: No, for then the cloth won't have any color at all and won't be perceptible.

Objection: Then let perceptibility only occur in things which inhere in some colored substance.

Answer: No, that would involve heaviness.

23 (E9; T123) Annambhaṭṭa reviews the theories of cooking called *piṭharapāka-* and *pīlupāka-vāda*.

27 (E10; T133) In this text, as in the other definitions, one must understand by "cause" or "condition" one that is specific (*asādhāraṇa*).

Contact is of two kinds, produced by motion, and produced by contact. It is a non-locus-pervading quality. To be non-locus-pervading is to have the same locus as one's own absolute absence.

28 (E11; T135) Disjunction also has two kinds, that which is produced by motion and that produced by disjunction.

30 (E11; T138) The definition of weight specifies "a thing's beginning to fall" (not just its falling) in order to exclude inertia (*vega*) from its scope. Inertia is the non-inherence cause of the subsequent falling of the thing.

33 (E12; T141) Sound is of three kinds: (1) that induced by contact, like that between a drum and a stick; (2) that induced by disjunction, like the *cata-cata* sound produced by the disjunction between two halves of a piece of bamboo; (3) that produced by sound, e.g., the sounds in the series after the initial drumming contact, which series terminates in the auditory organ.

37 (E13; T148-152) Objection: The definition under-extends, since there are (on occasion) veridical experiences such as "there is pot-ness in pot", but here the qualificand pot-ness has absence of pot (rather than pot) as its chief qualifier.

Answer: To say that something *has* something else, in the sense intended in this definition, is merely to say that there is some relation between them, not necessarily that of possession.

38 (E13; T152) Objection: This definition over-extends to include the veridical awareness "this has contact".

Answer: No. The definition has to be understood as saying that a non-veridical experience is one which has *x* for its chief qualifier by a certain relation R, when its qualificand has absence of *x* by R. Thus, since the objector's awareness has to do with contact in general, but its qualificand, *this*, has absence of contact in a specific region, it does not fall under the definition of non-veridical awareness.

41 (E14; T156-157) Objection: On the definition of "cause" given in the text, the color of the threads will have to be regarded as a cause of the cloth.

Answer: No, for the definition has to be understood to exclude irrelevancies (*anyathāsiddha*). There are three kinds of irrelevancy (1) where *x*'s antecedence to *y* is known only when some *z* is known, then *x* is rendered irrelevant: e.g., the color of the threads, or their thread-ness, is rendered irrelevant to being the cause of the cloth, since the threads, which always accompany them, are the cause. (2) Where *x*'s antecedence with reference to *y* can be known only after its antecedence with respect to some *z* has come to be known, then *x* is rendered irrelevant:: thus space is known to be antecedent to cloth only

after it has come to be known to be antecedent to the threads. (3) Where *x* exists only with something which is an admittedly uniform antecedent in other cases and from which effect *y* is produced, then *x* is rendered irrelevant: e.g., the prior absence of color is irrelevant with reference to a smell which is due to contact with fire.

47 (E15; T170) Objection: What is the proof of construction-free awareness?

Answer: The awareness of a qualified entity expressed, e.g., as "(this is a) cow", is produced from an awareness of the qualifier, because the awareness is of a qualified thing, like the awareness of a man with a stick. That is the inference which proves it. If the awareness of the qualifier were itself held to be construction-filled there would result infinite regress.

48 (E15-16; T177-178) From the analysis in the text it follows that non-perception (*anupalabdhi*) is not an additional instrument of knowledge. Since the sense-organ can grasp the absence of a pot on the ground, then, given the functioning of that organ together with a *tarka* of the form "if there were a pot at that place I would see it; since I don't, it isn't there", it is not proper to postulate an added instrument of knowledge.

Annambhaṭṭa here comments that the causal condition *par excellence* of perceptual awareness, the sense-organ, is the specific condition (*asādhāranakārana*).

49 (E16; T189) Objection: If inferential awareness is awareness produced from consideration there is over-extension to include a perception following upon a state of doubt, since just after one has judged "it is either a post or a man" there may follow a consideration of the form "but this thing has arms, etc.", from which there ensues the perceptual awareness that it is a man.

Counterobjection: That *is* inference!

Objector: No, since we subsequently have the after-cognition "I am perceiving a man".

Answer to the objection: What the passage intends is that inferential awareness results from consideration accompanied by *pakṣatā*. *Pakṣatā* is absence of certainty about the *sādhya* accompanied by absence of the desire to infer. Thus certainty about the *sādhya* is an obstructor to inferential awareness, but if there is desire to infer, even when there is certainty about the *sādhya*, inferential awareness arises anyway.

50 (E17; T20o-201) Pervasion of the *hetu* by the *sādhya* is the *hetu*'s having a common locus with a *sādhya* which is not the counterpositive of an absolute absence which has a common locus with the *hetu*.

52 (E17; T205-206) Objection: Even after repeated for one hundred times of concomitance between, say, earth-ness and scratchability-by-iron, a counter-example can still be found in, say, a diamond. So how can pervasion ever be ascertained?

Answer: What leads to awareness of pervasion is awareness of the concomitance of *x* and *y* accompanied by the absence of awareness of any counterexample. Now awareness of a counterexample may be one of two kinds: either a confirmed instance or a suspected instance. To bring about the absence of awareness of counterexample sometimes *tarka* is utilized, or sometimes it is just obvious. In the case of smoke and fire it is a *tarka* (of the form "if smoke were not concomitant with fire then it would not be produced by fire") which sets to rest the suspicion of a counterexample.

Objection: But without inspecting all examples of smoke and fire how can concomitance between them be known for certain?

Answer: It is possible to know all instances of smokes and fires by *sāmānyalakṣana* perception of the properties fire-ness and smoke-ness.

54 (E18; T221) Objection: Since one can derive inferential awareness from memory of the pervasion together with *pakṣadharmatā*, why is consideration necessary?

Answer: Since in inferring from hearing from others the inference about the mountain, fire and smoke, though there is no memory of pervasion, consideration must be admitted there, and so it will be more economical to recognize it as the causal condition *par excellence* of inferential awareness in all cases, perceptual or verbal.

The *hetu* should not be viewed as the cause *par excellence* of inferential awareness, since a past or future *hetu* fails to produce inferential awareness.

However, if one interprets the cause *par excellence* as a cause which functions through an operation, then knowledge of pervasion is the cause *par excellence* of inferential awareness, and consideration is the operation.

55 (E19; T227-228) In the text the author gives as an example of only-negative inference the following: earth differs from other things because it has smell, unlike water. An objector now asks: Is this difference from other things (1) established or (2) not established? If it is established, then

either (1a) its locus is also the locus of the *hetu*, or (1b) it is not. If (1a), then the inference is not only-negative but positive-negative. If (1b) the locus of the *sādhya*, difference from other things, is not also the locus of the *hetu*, the fallacy of being too-specific will be committed (since only the *pakṣa* will be a *sādhya*). If (2), this difference from other things being not established, the *pakṣa* cannot come to be known as having this difference as its qualifier; furthermore, there can be knowledge of pervasion between the *hetu* and the *sādhya*.

Answer: The difference from other things that is spoken of here is a collection of thirteen differences, starting with difference from water (and so on through difference from air, etc., i.e., eight differences from other substances) as well as difference from quality (and so on through difference from motion, etc., i.e., five differences from the other categories). These thirteen differences are being predicated distributively (not collectively) of the *pakṣa* earth. Thus neither (1a) nor (1b) are the case, since there is no single difference to share or fail to share a locus with the *hetu*; rather, there are thirteen differences. And (2) is also not the case, since although there is no single difference that is the *sādhya*, one can come to know the pervasion between the *hetu* and each of the thirteen differences involved.

56 (E20; T238) Objection: Scripture tells us that we should consider (*manana*, i.e., inferring) after hearing (*śravaṇa*) about the nature of the self. Now once one has heard from scripture the nature of the self there can be no uncertainty or suspicion about it, so the definition of the *pakṣa* in the text contradicts scripture. Furthermore, one sometimes infers the presence of a *sādhya* even though one has perceived its presence (e.g., one may infer fire from smoke even when one can see the fire).

Answer: The proper definition of "*pakṣa*" thus should be "the locus of *pakṣatā*", where *pakṣatā* is to be understood in the manner of section 49 above.

63 (E21; T257) There are four kinds of obstruction (*upādhi*). (1) *Kevalasādhyavyāpaka*, as in the text, the example being wet fuel, which pervades the *sādhya* without qualification. (2) *Pakṣadharmāvacchinnavyāpaka*. This obstruction pervades the *sādhya* as limited by a property of the *pakṣa*. Example: in the inference "air is perceptible, because it is the locus of perceptible touch", having manifested color is an obstruction since, although it does not pervade perceptibility unqualified, it does pervade perceptibility-of-an-external-substance. (3) *Sādhanāvacchinnasādhyavyāpaka*. This obstruction pervades the *sādhya* as limited by a property of the *hetu*. Example: in the inference "destruction is destructible, because it is a product", being positive (*bhāvatva*) is an obstruction since, although it does not pervade the *sādhya* outright, it does pervade destructibility-of-a-product. (4) *Udāsīnadharmāvacchinnasādhyavyāpaka*. This obstruction pervades the *sādhya* as limited by some property other than a property of the *pakṣa* or *hetu*. Example: in the inference "prior absence is destructible, because it is knowable", being a product is an obstruction since, although it does not pervade the *sādhya* outright, it does pervade the qualified *sādhya* destructibility-limited-by-being-an-effect.

64 (E22; T263) The sublated and the counterbalanced *hetu* obstruct inferential awareness directly by producing awareness of a contrary thesis. The rest of the fallacies operate by obstructing consideration. Too-general does so by possessing the absence of non-wandering of the *hetu* from the *sādhya*, contradiction by obstructing the *sādhya* and the *hetu* having a common locus, *vyāpyatvāsiddha* by obstructing knowledge of the desired pervasion relation, too-specific and inconclusive by producing doubt about pervasion. *Āśrayāsiddha* and *svarūpāsiddha* block knowledge of *pakṣadharmatā*. An obstruction blocks knowledge of pervasion.

Proving what is already accepted (*siddhasādhana*) should be considered a kind of *āśrayāsiddha* fallacy, as it blocks *pakṣatā*: that is the view of the old school. The new school holds that it is an additional way of losing an argument.

66 (E22-23; T273-300) The Mīmāṃsakas say that causal efficacy (*śakti*) is an additional category. It is to controvert that view that the text says that causal efficacy is nothing more than *saṃketa* or will of God, and not an added category.

(The Mīmāṃsakas say that) common nouns like "cow" designate universals only. When we hear a word we first cognize the universal property as qualifier, and then by presumption (here, *ākṣepa*) become aware of the thing qualified.

This view is, however, wrong. We say such things as "bring a cow", and since bringing is only cogent with respect to a particular thing, it is the particular (and not the universal) which is directly designated by such a word as "cow".

We learn the designative power of a word in many ways: one way is by noting the different behavior of elders when, e.g., they are told "bring the cow" and when they are told "bring the horse and bind the cow". We infer from the differences in the behavior of the hearers of these words that the power of the word "cow" indicates individuals possessing cow-ness, while the power of "horse" indicates individuals possessing horse-ness.

Common nouns may also have (in context) secondary meaning (*lakṣaṇā*). A term's secondary meaning is its relation to a thing which is designated by it. E.g., in the statement "the village is on the Gaṅgā", since the term "Gaṅgā" signifies the river of that name, and the bank is nearby, it only secondarily means the river-bank. On the other hand, in the case of an ambiguous term like "*saindhava*" (which means either "salt" or "horse"), there being no relation between salt and horse, one assumes multiple designative potencies.

There are three kinds of secondary meaning. (1) *Jahallakṣana* occurs when there is no appropriate logical relation between the things signified by the terms--e.g., "the platforms are shouting" (since platforms aren't the kind of thing that can shout). (2) *Ajahallakṣaṇa* occurs when an appropriate logical relation is not excluded: e.g., "people with umbrellas are passing by", where what is meant is that a party of people, some of whom are carrying umbrellas, is passing; the statement refers to both those who do and those who do not actually carry an umbrella. (3) *Jahalajahallakṣaṇa* when there is both an appropriate logical relation (with one part) and the impossibility of such a relation (with another part of what is directly signified) holds: e.g., in "that art thou" (as interpreted by an Advaitin).

The "figurative meaning (*gauṇīvṛtti*) of words is the same as their secondary meaning, as also is the "suggestive power" (*vyañjanā*) of terms.

The occasion for invoking secondary meaning arises when there is difficulty in grasping the intention of the speaker. Awareness of the speaker's intention is one of the conditions of understanding a sentence; otherwise we couldn't disambiguate sentences containing ambiguous word. It is the context of utterance which indicates the speaker's intention. And so in such a statement as "...the door" (*dvāram*, in the accusative singular), we may supply (the imperative verb) "shut" (in coming to understand the sentence).

Prābhākara objection: No, what has to be supplied can

only be the meanings of the words (not the words themselves). Now if we do not already know what the sentence means we will not know which meanings to supply. So the meanings must be present to our mind *before* we can choose the right term (e.g., "shut" above) to make the right sense for the sentence.

Answer: No, since merely knowing some meanings (viz. objects) is not enough; the objects must be the ones we come to know from certain words in certain relations. Thus the supplying of the words must precede the supplying of the meanings.

A word such as "*paṅkaja*" ("mud-born", "lotus") is a term whose significance is termed "*yogarūḍhi*". "*Yoga*" refers to the power of the parts of a word--here "*paṅka*" means "mud" and "*ja*" means "born"--while "*rūḍhi*" refers to the power of the word as a whole, the lotus. The term must be admitted to have *both* sorts of significance, since otherwise (if it only had the "*yoga*" sort) anything born from mud (other flowers, grass, etc.) would also answer to the term "*paṅkaja*" (whereas in fact it is used only to refer to a lotus).

The Prābhākaras say that the significative power of a word involves not only the object designated but also its relations to the other objects designated by other words in the sentence in which that word occurs. The Naiyāyikas, however, hold that it is not necessary to postulate such relational significance for the words; the relationships among the objects designated is indicated by the order of the words in the sentence, they are not additional things or kinds of things.

67 (E24; T302-303) When the text says that expectancy, fitness and proximity are causes of understanding it should be read as saying that our *awareness* of these conditions conduces to understanding, for otherwise it would be unintelligible that we might misunderstand a sentence.

A mere string of (uninflected and unordered) terms is not a meaningful sentence, since it lacks expectancy, etc.

68 (E24-25; T307-317) Mīmāṃsaka objection: Since the Vedas are beginningless how can they be said to be "produced by God"?

Answer: The Vedas are produced by a person, because they are a collection of statements, like the *Mahābhārata* and other books.

Objection: This inference is mistaken, since there is an obstruction, viz. remembered authorship. (I.e., though it is not the case that whatever is a collection of statements is produced

by a person, it is the case that whatever is a collection of statements whose author is remembered is something produced by a person. But the Vedas are not of remembered authorship.)

Answer: Not so, for Gautama and other sages of old did remember God's authorship. Indeed, scripture itself attests to this when it says "from that thinking Being the three Vedas arose".

Objection: Since we recognize the syllable "*ga*" over and over as the same, syllables must be eternal. But the Vedas are series of syllables, so they must be eternal as well.

Answer: No. For one thing, we regularly say that one "*ga*"-sound has ceased and another arisen, which shows that syllables are non-eternal. Secondly, the "recognition of syllables" alluded to is actually an awareness of a universal property, just as we recognize the flames in a fire because we are aware of a universal fire-ness in them. Thirdly, the Vedas or any other statement is not merely any series of syllables, but a particular series (dependent on the person uttering it on an occasion).

Traditional texts (*smṛti*) such as Manu's *Dharmaśāstra* are authoritative because they are based on scripture, even though they are not actually found in the Vedas. Thus they must once have comprised a part of scripture and been lost.

Objection: It is not that any scripture got lost--that is impossible. Instead we must infer an eternal Vedic corpus which is the source of the traditional texts in question.

Answer: But if this original Veda is only inferrable but never actually given directly, it follows that we cannot know the *order* of the syllables which constitute this postulated scripture. And in that case we cannot know what it means at all, for in order to understand a sentence one must know what the order of the syllables specific to a given utterance are.

Vaiśeṣika objection: Verbal testimony is not a separate instrument of knowledge, because an awareness of the relation between the meanings of the words in a sentence arises from inference--the inference in such a form as "these words produce awareness of the relation among the objects called up in memory by them, because they are collections of words having expectancy, etc., like any other sentence.

Answer: No, for everyone realizes that understanding a sentence's meaning is different from inferential knowledge; we rather count it as a kind of after-cognition.

Objection: Presumption is an additional instrument of

knowledge, the one by which we know that Devadatta eats at night since he is fat and is not seen to eat in the daytime.

Answer: No, that is just an inference.

Concurrence is likewise a kind of inference, not an added instrument of knowledge.

Tradition, such as "a *yakṣa* lives in this tree", is merely a report of a statement originally made by someone whose identity we've forgotten.

Gesture only becomes an instrument of knowledge through either testimony or inference.

69 (E25-26; T322-323) The position of the intrinsic ascertainment of truth (*svataḥprāmāṇya*) is this: that the truth of an awareness is grasped by every set of conditions which would reveal the occurrence of that awareness without revealing its falsity. If "every" were omitted from this definition the thesis would be guilty of proving what's already accepted, while if the phrase "without revealing its falsity" had been omitted false awarenesses would be true. And if reference had not been made to "*its* falsity", then the truth of an after-cognition such as "this awareness is false" could not be grasped intrinsically, since such an after-cognition does reveal falsity, though not its own falsity: thus the "its" in the definition above refers to that awareness whose truth is being spoken of, and not to any awareness whatsoever.

A Miśra Mīmāṃsaka: Yes, the truth of an awareness *is* grasped intrinsically. The set of conditions which would reveal (in an after-cognition) the occurrence of an awareness, say, of pot without revealing its falsity is the same set of conditions required for the awareness of the truth of that awareness. Those conditions are three: a something claimed to be the locus of pot-ness (the qualificand), pot-ness (the qualifier), and the relation of qualification between them.

Answer: No, for if it were so there could be no such thing as doubt about the truth of an awareness occurring just after one has had the awareness (as in "is this awareness of water true or not?"). For the conditions allegedly provide certainty about the truth of the original awareness.

So truth must be cognized extrinsically. Just after cognizing, say, water, if one tries to get the water and succeeds, the truth of the first awareness is known by inference, an inference of the form "the first awareness is true, because it has led to successful activity, unlike a false awareness". Subsequent awarenesses of water are also known by inference, but both

positive and negative examples showing concomitance can be found there (a previous awareness providing the positive example).

As for the question of what is the origin (*utpatti*) of an awareness' truth, the answer is that it is an excellence (*guṇa*). It is a fault (*doṣa*) which generates a false awareness. In perception, the excellence in question is a sense-organ's relation with the qualificand that actually has the qualifier. In inference it is the awareness of the *pakṣa*'s actually having the *sādhya*-pervaded *hetu*. In comparison it is a correct awareness of similarity. In the case of verbal testimony it is the correct awareness of fitness. Faults are to be explained in a manner relating to these.

The falsity of an awareness is also known extrinsically. Since in the after-cognition (in which we judge the first awareness to be false) the absence of the qualifier that is presented to the senses is not presented, falsity cannot be known intrinsically.

Prābhākara: Since all awarenesses are true there is no such thing as a false awareness.

Counterobjection: But since it sometimes happens that a person aware of silver (in what is really shell) proceeds to act unsuccessfully, it must be the case that he judges thing otherwise than they are.

Prābhākara: No, the activity is produced by a sensation of something (the shell) together with a memory of something else (silver).

Counterobjector: A sublating awareness "that (shell) is not silver" which, according to you Prābhākaras must be a combination of a sensation and a memory, should also lead to activity to confirm or disconfirm it; but it doesn't; so your account must be incorrect.

Prābhākara: It is because in the first case (mistaking shell for silver) we fail to distinguish the sensation from the memory, while in the second case (the sublating awareness) we do, that we are moved to act toward a unitary object in the first, but not in the second, case.

Annambhaṭṭa: The Prābhākara contention is mistaken, since it is unnecessarily complex. If one admits that unitary awareness of a qualified thing, e.g., silver in a veridical awareness of silver, leads regularly to activity, then one ought to admit as well that in the case of the shell-silver also, since here too one is aware of something qualified.

70 (E26; T346) Dream is a "mental" error (*mānasaviparyāya*).

71 (E26; T347) "....in a single entity" excludes from the scope of the definition an awareness of the collective (*samūhālambana*) kind, where we grasp several things with incompatible features. "Incompatible" excludes a judgment such as "a pot is a substance", since substance-ness is not inompatible with pot-ness. The term "diverse" excludes a judgment such as "this thing is characterized by pot-ness which is incompatible with cloth-ness", for pot-ness-which-is-incompatible-with-cloth-ness is a single "incompatible" feature!

72 (E26; T350) Error is the ascertainment of a thing having x as its chief qualifier where it actually has absence of x.

73 E26; T351) *Tarka* is a kind of error; it is mentioned as a separate kind of non-veridical experience (in 70) because it can be used to assist the instruments of knowledge.

75 (E27; T355) The text gives, not a definition, but a description of the nature of pleasure. The definition of pleasure is just that it is what has the property pleasure-ness.

80 (E27; T360-361) The new school believes that memory (as well as experience) can produce traces.

The eight qualities beginning with number (i.e., number, size, separateness, contact, disjunction, farness, nearness and weight) plus accidental fluidity, impetus and elasticity, are called generic (*sāmānya*) in contrast to other qualities such as color, which are specific (*viśeṣa*). A specific quality is defined as a thing which possesses a universal property which has a common locus with a pair of imposed properties that account for distinctions between substances (*dravyavibhājakopādhi-dvayasāmānādhikaraṇajātimattvam*).

81 (E28; T364) Contraction (*akuñcana*) is defined as what makes a thing curve. Expansion (*prasaraṇa*) is what makes a thing straighten out.

82 (E28; T365) "Universals reside....", i.e., inhere in more than one locus. This excludes, e.g., absolute absence of pot, say, which though it is related to many pots is not related to them by inherence.

84 (E28; T370) The argument which proves the existence of inherence is this: An awareness of a qualified thing, (e.g., "a blue pot") is something which involves a qualifier, something qualified, and a relation between them, because it is an awareness of a qualified entity, like "a man with a stick".

85 (E28; T374-375) Prior absence resides in the

inherence cause of its counterpositive. It is the occasion for the awareness expressed in the common locution "it will come to be".

86 (E29; T378) Posterior absence resides in the inherence cause of its counterpositive, and is the occasion for the awareness expressed as "it is destroyed".

89 (E29-30; T387-388) There can be many absolute absences, and many mutual absences, of the same counterpositive provided there is a difference in respect of the limiters (relational and non-relational) of the respective counterpositive-nesses. Thus, e.g., the absence of a qualified *x* is distinct from the simple absence of *x*, since we know that Devadatta without his stick is just Devadatta. Again, the absence of two things is distinct from the absence of one of two things, for we say "the pair (*x* and *y*) is not present" even when we know that *x* is present and *y* is not. Again, absence of pot by inherence is distinct from absence of pot by contact. Finally, absence (say, of pot) in general is distinct from absence of a particular pot--the former has a counterpositive-ness limited by pot-ness, whereas the latter's counterpositive-ness is limited by a particular pot.

There is no real entity to be described as an absence whose counterpositive-ness is limited by a property belonging to something else other than the counterpositive (*vyadhikaraṇa-dharmāvacchinnapratiyogikābhava*), e.g., as when one might say "there is no cloth as qualified by pot-ness". All that this means is that pot-ness does not occur in cloths; (it is not an added kind of absence).

What some call "temporary absence" (*samāyikābhāva*) is only absolute absence apprehended at a particular time. Say, for instance, there is absolute absence of pot at a certain place at one time, and then a pot is put there. The absence does not move somewhere else; rather, we fail to be aware of that absence as long as the pot is there. Our awareness of the presence of absolute absence is conditioned by there being either a prior absence or a posterior absence of pot.

Prābhākara: Absence should not be admitted as a separate category, for it can be accounted for in terms of the bare locus (i.e., the bare-ness of the place where the counterpositive is absent).

Answer: No, since it is impossible to explain what "bare-ness" means without invoking the notion of an absence.

The absence of an absence (or "double absence") should

not be supposed to constitute a distinct, additional kind of absence, for it is nothing but a presence or positive entity. Otherwise there would be an infinite regress. The old school, which holds this view, construes the prior absence of a posterior absence, or the posterior absence of a prior absence, as nothing more than the counterpositives of those absences. (Thus "the absence of absence of *x*" denotes *x*.) The new school, however, says the absence of absence is an absence (not a presence). They avoid the regress by making that double absence identical with the original absence (so that "absence of absence of *x*" denotes the same absence that "absence of *x*" denotes).

90 (E30; T403-404) The seven categories include all the sixteen categories enumerated in the *Nyāyasūtras*. Those sixteen categories are explained in some cases and their varieties listed in others.

91 (E30-31; T405-406) Objection: Power (*śakti*) has to be admitted as an added category, since if one's hand, say, makes contact with fire burning still may not occur provided there is some obstructor, (which shows that the power of the fire to burn is something additional to the fire).

Answer: No. The absence of obstruction is a general causal condition of any effect (so we don't have to adduce a new category to explain the fact of obstruction). Furthermore, what is denoted by the word "*śakti*" is nothing more than causality, and so power is not an added category.

Objection: When one purifies a utensil by rubbing it with ash, etc., the purity thus produced must be admitted to be a kind of power, an "induced power" (*ādheyaśakti*).

Answer: No, this purity is only a combination of two absences, viz. the destruction of contact with purifying substances together with the absolute absence of contact with some polluting thing. Thus we don't need an added category.

Ownership (*svatva*) is not an added category, but just a thing's fitness to be disposed of according to the wishes of someone, a fitness occasioned, say, by someone's giving the thing to one, etc.

92 (E31; T410-412) An injunction is the content of an awareness which produces a desire to act which in turn produces a volition. Or, it is the optative, etc. which (grammatical moods) signify such a content.

Prābhākara: It is the awareness that something can be obtained by one's will (*kṛtisādhyatājñāna*) that is the condition

for volition (and not the desire to act. For no volition occurs except when someone believes that something can be obtained, and volition only occurs with reference to an obtainable thing.

Counterobjector: Then, since one may well have the awareness that one can take poison at will, one should be caused thereby to take poison!

Prābhākara: The awareness must be further specified as being an awareness that the object of the volition conduces to something desired. Furthermore, the kinds of acts meant here are *kāmya* (actions which are not ritually obligatory), not *nitya* and *naimittika* (obligatory) acts. In the case of obligatory actions the volition is caused by awareness that something can be obtained at will since one is a pure person and the time is appropriate.

Counterobjector: So there are two theories here, not one!

Prābhākara: It can be viewed as one theory, viz. that volition is caused by awareness of one's possession of attributes needed for getting the object.

Annambhṭṭa: No, the condition for volition is (not merely awareness that *x* can be obtained at will but) the awareness of *y*'s being a means to obtaining desired *x* and that *y* can be obtained through one's volition.

Objector: This will not work for obligatory acts, since they do not lead to any desired end.

Answer: No, since the end is the avoidance and destruction of evil.

Prābhākara: The optative (is not the injunction, but rather) is the *apūrva* which is a means to heaven, E.g., a Vedic injunction says "one who desires to obtain heaven should sacrifice (*yājeta*, in the optative) with the *jyotiṣṭoma* sacrifice". Since the sacrifice is a fleeting event it cannot produce heaven at some future time; so it must be the *apūrva* produced by the sacrificial act that leads to heaven and is the designation of the optative. When the injunction is of a more ordinary sort--e.g., "one who desires to get well should take medicine"--the optative doesn't signify *apūrva* but rather just the act to be performed (here, taking medicine).

Annambhatta: Since in the latter kind of ("secular") case the optative signifies (as shown previously) the property of an action (*y*) which is a means to obtaining desired *x* and which (*y*) can be obtained through one's volition, and since the same analysis can likewise be applied in the case of Vedic injunctions, one does not need to invoke *apūrva* as the meaning of the

optative. Rather, the *apūrva* is inferred to be the intermediating operation connecting the act with its result, heaven.

The optative has been shown to designate a certain property. But, since it is a verbal suffix, it also signifies the volitional act enjoined. All verbal suffixes indicate volitional acts--e.g., one says "he is cooking", and when asked "what is he doing?", the answer is "cooking"!

Objection: How about "the car is moving"? Surely the car is not engaged in volitional activity!

Answer: Granted the suffix here does not directly signify volition, but it indirectly signifies it by indicating something connected with it, namely the intermediate operation (which in the case of the car is presumably the movement of its parts, among which are some that are due to someone's volition).

The designation of a verbal suffix is neither the object nor the agent of the act, but rather the single act itself, from which the presence of agent and object are of course inferrable.

Verbal prefixes (e.g., *pra-* in *prajāyati*, "he conquers") do not designate anything by themselves, but indicate excellences, etc. thus assisting the root.

93 (E32; T424) The final purpose of the knowledge of the categories is liberation. The Vedas say one should hear, consider, and meditate on the self. What that means is this. One hears about the difference of the self from other things, and this gives rise to doubts which can only be removed by inference, i.e. consideration. Having gained understanding, by constant meditation according to scripturally-supported yogic practices, the direct awareness of the nature of the self is obtained, which leads to the destruction of false awareness, which in turn causes the destruction of the faults, followed by absence of volitional activity, producing absence of merit and demerit, and so the cessation of future births. And when the previously-earned merit and demerit is destroyed, liberation, the final destruction of frustration, ensues.

Knowledge alone is the way to liberation, since only when false awareness ceases can liberation occur. Scripture repudiates any other means.

Objection: But scripture also indicates that both knowledge and action are required, so the combination theory (*jñānakarmasamuccaya*) is correct.

Answer: No, actions are the means of obtaining knowledge, as scripture goes on to indicate (and is confirmed by quoting the passages).

46.132. ANNAMBHAṬṬA, *Siddhañjana* on Pakṣadhara's *Tattvacintāmaṇyāloka*

Manuscript references are found at NCat 8, p. 40b and NCat I, 236.

46.133. ANNAMBHAṬṬA, *Prakāśa* on Udayana's *Nyāyapariśiṣṭa*

Manuscript references at NCat I, p. 236.

46.134. ANNAMBHAṬṬA, *Subuddhimanorama* on Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

Manuscript references are at NCat 8, 28b and NCat I, 236.

46.135. ANNAMBHAṬṬA, *Tattvaprabodhinī* on Keśava Miśra's *Tarkabhāṣā*

Manuscript citation at NCat I, 236. Anantalal Thakur (ODVS p. 352-353) is not convinced that this ascription is correct. He also is (apparently) unaware of most of the foregoing works.

47. RĀMA TARKĀLAMKĀRA (1620)

Various authorities (Ingalls, Umesh Mishra, Gopinath Kaviraj) suggest that this writer was the son of Rāmabhadra Sārvabhauma and the father of Mathurānātha Tarkavāgīśa. R. Thangaswami Sarma (DM, p. 221) makes him both the pupil of Raghunātha Śiromaṇi and the father of Mathurānātha, which seems to stretch things a bit. Gopinath Kaviraj (p. 61) interprets a passage in Mathurānātha's *Māthurī* to say that he wrote a voluminous commentary on the *Tattvacintāmaṇi* (GK, p. 61)--Gopinath is not altogether convinced, however.

We know of two works generally attributed to this writer:

47.136. RĀMA TARKĀLAMKĀRA, *Tippanī* on Raghunātha Śiromaṇi's *Didhitī* on Udayana's *Ātmatattvaviveka*

This has been edited in Chowkhamba Sanskrit Series 63, 1925-27 by Rajeswara Sastri Dravida. V. Varadachari submits the following comments:

"In the Introduction to the edition of the text with this commentary Rajeswari Dravida, the editor remarks (on p. 6) that Rāmatarkālamkāra was a pupil of Raghunātha Śiromaṇi.

At the beginning of his *Rahasya* Mathurānātha Tarkavāgīśa pays his respects to his father Rāmatarkālamkāra, describing him as a master of Nyāya. The commentary is written by the author on Raghunātha Śiromaṇi's *Ātmatatvavivekadīdhiti*. It is available up to page 412 (text). The author refers to an interpretation associating it with someone whom he mentions as '*gurucaraṇāh*' (com., p. 24). This is not found in the *Dīdhiti* and so it is not easy to believe that the author was the pupil of Raghunātha Śiromaṇi. Besides, he disagrees with the interpretation of Raghunātha Śiromaṇi (com. p. 363). He states openly his view which is not the same as that of his supposed teacher". (com. p. 5.)

47.137. RĀMA TARKĀLAMKĀRA, *Rahasya* on Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

Umesh Mishra (UM p. 426) notes a manuscript of the *Anumāna* section of this work; he provides the first two *ślokas*, in which Rāma refers to a Sārvabhauma as his teacher, whom Mishra speculates may be either Kṛṣṇadāsa Sārvabhauma Bhaṭṭācārya or Rāmabhadra Sārvabhauma.

48. KAUṆḌINYA DĪKṢITA (1620)

We know nothing about this author other than his work.

48.138. KAUṆḌINYA DĪKṢITA, *Prakāśikā* on Keśava Miśra's *Tarkabhāṣā*

Consult NCat V, 104; VIII, 118 for manuscript citations.

49. JAYARĀMA NYĀYAPAÑCĀNANA (1620)

(ODVS, p. 358): "One can feel from the writings of two of his non-Bengalee pupils how great the fame was of their preceptor. Janārdana in his commentary named *Mañjarī* [?] calls him Jagadguru (the preceptor of the world) and at the end of the commentary writes: 'I always salute my great preceptor Jayarāma in whose tongue the goddess of learning dances. Having learnt from him the whole Nyāyaśāstra I compose this commentary.' Another pupil of Jayarāma, Laugākṣi Bhāskara praises his preceptor Jayarāma: 'He travelled the end of all *śāstras* and his victory (*jaya*) thrived (*rāma*) by defeating the opponent." (The passages are translations of passages from VNNC, pp. 280-281.)

Satis Chandra Vidyabhusana in HIL pp. 477-478 lists some of Jayarāma's works and provides a bit of additional information "Jayarāma was a pupil of Rāmabhadra Sārvabhauma.... He was patronized by Rāja Rāmkṛṣna of Krishnanagar who obtained from the Pandits of Nadia the hereditary title of Navadvīpādhipati (Lord of Nadia)."

Gopinath Kaviraj (GK, p. 69): "Jayarāma's time can be determined with exactness and he may be assigned to the third and fourth quarters of the 17th century. For there is evidence to show that he was living at Benares in *saṃvat* 1714 or A.D. 1657 and composed one of his works in *saṃvat* 1750 or A.D 1693." Evidence for the former date is given by Kaviraj in a footnote: "In the 'Decision' of Benares Paṇḍits dated Saṃ 1714 the name of Pt. Jayarāma Nyāyapañcānana occurs in the list of the signatories."

49.139. JAYARĀMA NYĀYAPAÑCĀNANA, *Sudhā* on Raghunātha Śiromaṇi's *Ākhyātavāda*

The work has been edited by M. G. Bakre, Bombay 1931, with Raghunātha's text and various other commentaries.

49.140. JAYARAMA NYĀYĀPAÑCĀNANA, *Anyathākhyativicāra*

See NCat VII, 188 for manuscript citation.

49.141. JAYARĀMA NYĀYAPAÑCĀNANA, *Vivṛti* on Raghunātha Śiromaṇi's *(Guṇa)Kiranavalīprakāśadīdhiti*

Check NCat IV, 155 for locations of manuscripts.

49.142. JAYARĀMA NYAYĀPAÑCĀNANA, *Vyakhya* on Raghunātha Śiromani's *Nañvāda*

See NCat VIII, 189.

49.143. JAYARĀMA NYAYĀPAÑCĀNANA, *Vyākhyā* on Udayana's *Nyāyakusumāñjalikārikās*

Edited by Ramacandra Misra, Darbhanga 1986.

49.144. JAYARĀMA NYAYĀPAÑCĀNANA, *Nyayāsiddhāntamālā* on Gautama's *Nyāyasūtras*

This work has been edited by M. D. Shastri in the Princess of Wales Sarasvati Bhavana Texts series 21, 1927-28.

49.145. JAYARĀMA NYAYĀPĀÑCĀNANA, *Padārtha(maṇi)mālā*

Edited, with Laugakṣi Bhāskara's *Ṭīkā*, by N. Srinivasan in the Tanjore Sarasvati Mahal Series 217, 1985. Thakur (ODVS p. 358) remarks: (It) "is on the establishment of the seven Vaiśeṣika categories...(t)hough the work has naturally discussed many other neo-logical topics like *evakāra, śakti, sādṛśya, vaiśiṣṭya, kāraṇatā* etc...."

49.146. JAYARĀMA NYĀYAPAÑCĀNANA, *Vyakhyā* on Raghunātha Śiroman's *Padārthatattvanirūpaṇa*

Manuscript cited in NCat VIII, 189.

49.147. JAYARĀMA NYAYĀPAÑCĀNANA, *Gūḍhārthavidyotana* on Raghunātha Śiromaṇi's *Tattvcintāmaṇīdīdhiti*

Manuscripts listed at NCat VII, 189; VII, 32)

49.148. JAYARĀMA NYAYĀPAÑCĀNANA, *Viveka* on Pakṣadhara's *Tattvacintāmaṇyāloka*

Manuscripts listed at NCat VII, 187; III, 376.

50. RUDRA NYĀYAVĀCASPATI TARKAVĀGĪŚA (1625)

If we can believe Umesh Mishra (UM, p. 432), who gives no evidence, Rudra was the eldest son of Vidyānivāsa Bhaṭṭācārya, so may be dated around 1625. He lived in Kāśī, i.e. Varanasi. He apparently wrote a great many works, some of which are listed below. Chakravarti (Chakravarti pp. 286-287) writes: "By order of his father Vidyānivāsa copies of the *Kalpataru*, the smṛtic digest of Lakṣmīdhara (Naiyatakālika and Dāna Khaṇḍas) were copied in *śaka* 1510 or 1588 A.D. So Rudra must be later than this date. His time is further fixed by the poem composed in honor of Bhāvasiṃha, whose father Māṇasiṃha was governor of Bengal from the 38th to the 50th year of Akbar's reign or from 1593 to 1605 A.D. Rudra's time thus falls in the last decade of the sixteenth century and the first quarter of the seventeenth".

50.149. RUDRA NYĀYAVĀCASPATI, *Vyākhyā* on Raghunātha Śiromaṇi's *Ākhyātavāda*

This commentary has been edited by M. G. Bakre from Bombay in 1931.

50.150. RUDRA NYĀYAVĀCASPATI, *Parīkṣā* on Vardhamāna's *(Dravya)Kiraṇāvalīprakāśa*

"Thakur (ODVS p. 296) says "The manuscript is preserved in Bikaner, L. Mitra Catalogue, p. 546)". Manuscript references are to be found at NCat 5, 155b, where the work is listed as a commentary on Raghunātha's *Dīdhiti*, but that is wrong according to Ananthalal Thakur (ODVS, p. 322), citing D. C. Bhattacharya (VNNC p. 85.

50.151 RUDRA NYĀYAVĀCASPATI, *Ṭīkā* on Raghunātha Śiromaṇi's *Nañvāda*

Umesh Mishra cites Dineshchandra's *VNCC*, pp. 273-275, as authority for this ascription.

50.152. RUDRA NYĀYAVĀCASPATI, *Padārthanirūpana* on Raghunātha Śiromaṇi's *Padārthatattvanirūpana*

For manuscript citations see NCat 11, p. 106a.

50.153. RUDRA NYĀYA- or TARKA-VĀCASPATI, *Ṭīkā* on Viśvanātha's (?) *Siddhāntamuktāvalī*

See NCat for manuscript citations.

50.154. RUDRA NYĀYAVĀCASPATI, *Ṭīkā* or *Parīkṣā* on Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

Cf. NCat VIII, 33, 35.

50.155. RUDRA NYĀYAVĀCASPATI, *Vyākhyā* on Gaṅgeśa's *Tattvacintāmaṇi*

Cf. NCat VIII, 25.

50.156. RUDRA NYĀYAVĀCASPATI, *Saṃgraha* on Pakṣadhara's *Tattvacintāmaṇyāloka*

Cf. NCat VIII, 42.

51. JAGADĪŚA (MIŚRA) BHAṬṬĀCĀRYA (1630)

The first of the three great subcommentators on Raghunātha's *Dīdhiti*, Jagadīśa was a pupil of Bhavānanda Siddhāntavāgīśa and Rāmabhadra Sārvabhauma, which fixes his date clearly during the first quarter of the 16th century. His father's name is given as Yādava Vidyāvāgīśa; he was the third son and had five brothers. He came from an illustrious line going back through his grandfather Mādhava Miśra through his great-grandfather Sanātana to his great-great-grandfather Vāṭeśvara. According to Gopinath Kaviraj (GK p. 65), his two sons were Raghunātha, the author of *Sāṃkhyatattvavilāsa*, and Rudreśvara, the father of Rāmabhadra Siddhāntavāgīśa.

Anantalal Thakkur, however, questions the identification of Raghunatha, the son of Jagadīśa, with the author of the *Sāṃkhyatattvavilāsa*. Thakur places Jagadīśa's time period earlier than we do, saying he was born between 1540- and 1550, basing himself on D. C. Bhattacharya's *VNNC*, pp. 170-172.

51.157. JAGADĪŚA BHAṬṬĀCĀRYA, *Sūkti* on Praśastapāda's *Padārthadharmasaṃgraha*

Thakur at ODVS p. 301: "(T)he unprecedented popularity of Jagadīśa's commentary gradually drove the others written during a hundred years after Śiromaṇi into oblivion.... Only the portion on the *Dravya* section has been printed so far and this is because the [remaining] portion except a few leaves on *Guṇa* has not been discovered in manuscript."

"MM Tarkācārya notices an important feature of the text that in the case of the *Vaiśeṣikasūtras* themselves, readings adopted by him are, in some places, different from those usually accepted and to be found in works like *Praśastapādabhāṣya* etc. It is evidently felt that in Bengal or in Mithila, the *Upaskāra* reading of the Vaiśeṣika *sūtras* was in vogue, but in *Sūkti* the reading of the Vaiśeṣika *sūtras* sometimes varies from the *Upaskāra* also." Thakur cites a few such cases on pp. 301-302 of ODVS.

"E" references are to the edition by Kalipada Tarkacarya in Sanskrita Sahitya Parishat Series 15, 1925. No translation exists at this time. Section numbering corresponds to that in the summary of Praśastapāda's work in Volume II of this Encyclopedia.

Summary by V. Varadachari

Introductory section (E20). Jagadīśa takes the word "*codanā*" ("injunction") to mean the direction (*deśana*) of God and that this means the Vedas. From His directions it is made known that listening (*śravana*), considering (*manana*), etc. are the *dharmas* indicated by the Vedas. The meaning is that, even if there is awareness of the true nature of the categories, only if these are accompanied by listening, considering, etc. will

release result.

8 (E55-56) An individuator is defined by Praśastapāda as "occurring in the eternal substances as final (*antya*)". Jagadīśa offers two interpretations of the word "*antya*". According to the first, "*anta*" means "cessation" or "stopping", and so the definition is intended to exclude universals and qualities which inhere in eternal substances. On the second interpretation the *antya* substances are those which remain present during the great dissolution (*mahāpralaya*) between cosmic cycles, so that the karma of individuals does not continue in their substances during that time.

29 (E163) Jagadīśa quotes the passage (section 52 below) at which the *viśeṣaguṇas* are listed. Since some among the qualities listed are not qualities of selves, either the later passage must be read as a *paribhāṣā* passage (setting aside this one) or else *viśeṣaguna* must be defined, instead, as a quality which is the cause of specific sorts of perceptions.

38 (E197) Jagadīśa refers to those who view the *truṭi* as the smallest-sized, indivisible substance as "Svātantras".

The "new Buddhists" (*navyabauddha*) are said to hold that middle-sized-ness (*mahattva*) is not a kind of size but rather is the possession of a certain kind of arrangement which aids perceptibility. So, they say, even if atoms are in themselves imperceptible, their perceptibility when they are arranged in that way can be admitted.

(E198-199) A "body" (*śarīra*) is that which possesses motion where its inherence cause does not possess that motion. So, even the dead bodies of men or cows are bodies, while since there is no evidence that trees, etc. possess motion they fall outside the definition. But if one should defines a "body" as what possesses a universal property which occurs in the limiter of experiencing (*bhoga*), but does not occur in the inherence cause of that experiencing, then, since this over-extends to trees, etc. Praśastapāda, who does not accept that trees are bodies, will go on to classify trees, etc. as "objects" (rather than bodies).

39 (E259-260) Air has "non-hot and non-cold touch", says the text. Jagadīśa remarks that "non-hot" (*anuṣṇa*) excludes fire and "non-cold" excludes water. The text goes on to say that air's touch is not due to "cooking" (*apākaja*), which Jagadīśa understands to exclude earth. There is no oviparous airy body, since then it would over-extend to include earth.

(E353-354) Though spatial location (*dik*) is only one, it

is said by Praśastapāda to be of ten kinds in order to explain common usage as well as traditional references. Jagadīśa gives two Vedic passages, one from *smṛti* and one from the everyday world.

The word "east" (*prācī*) means that direction where the sun rises, "west" the direction toward which the sun moves. "Below" means the direction toward the earth from the stars, and "above" the reverse. Or, when the reference is to regions between the earth and the stars, "above" must be understood to mean the region toward which the lamp-flame reaches, while "below" is the direction toward which a heavy object falls.

44 (E361) Jagadīśa says that the self is perceived through the internal organ by yogis.

(E365) Praśastapāda says the self is like the lord of the house, since the body, like a house, can get bigger, be injured, etc. Jagadīśa remarks that this simile is defective, since the house has no movement produced by volition, while the body does. Therefore, he suggests the following inference: The living body is controlled by someone having volition, because it is subject to improvements, like one's house.

51.158 JAGADĪŚA BHAṬṬĀCĀRYA, *Mayūkha* on Gaṅgeśa's *Tattvacintāmaṇi*

The work is only available in fragments. Cf. "E" for the previous work, p. ii; NCat VII, 126. The first part of this (through *Sāmānyābhāva*) is cited in CSCR 36, pp. 347-348, as constituting a good manuscript.

51.159. JAGADĪŚA BHAṬṬĀCĀRYA, *Ṭīkā* on Raghunātha Śiromaṇi's *Nyāyalīlāvatīprakāśadīdhiti*

Kalipada Tarkacarya, "E" of 51.157, on p. ii of his Introduction to his edition (EnInPh Bibliography #278.1.4), refers to this work. NCat VII, 125 notes a manuscript of this work at L. 1203. Cf. also Thakur, ODVS p. 321 for more locations of manuscripts.

51.160. JAGADĪŚA BHAṬṬĀCĀRYA, *Jāgadīśī* on Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

This, the earliest of the three great subcommentaries on Gaṅgeśa's masterpiece, is available in print in a variety of editions.

51.160.1 *Anumiti*

51.160.2. *Vyāptipañcaka*

Summary by Madhusudana Nyayacarya

"E" references are to Vamacarana Bhattacharya's edition (EnInPh 1, Bibliography, #788.1.37), Banaras 1935.

(E89-90) Jagadīśa first shows the relevance of this (*Vyaptipañcika*) section to the preceding one. Gaṅgeśa undertakes to prove that inference is a source of knowledge, but starts examination of the nature of pervasion. So the question arises: how is this examination relevant to his purpose? In answer to this question Raghunātha points out that the determination of the nature of pervasion is the indirect cause of the examination of the validity of inference. This relevance is called "*upodghāta*"

(E91-94) The first definition of pervasion (non-deviation) which Gaṅgeśa examines is as follows: Non-deviation is the non-occurrence of the *hetu* in a locus of absence of the *sādhya*.[1] This definition is rejected because it is too narrow, for it does not apply to a non-locus-pervading *sādhya*. The definition, of course, applies to pervasion by a locus-pervading *sādhya*, hence Jagadīśa says that Raghunātha has chosen an example of pervasion by a non-locus-pervading *h* to show the defect of this definition.

Now pervasion is the relation between the *sādhya* and the *hetu*. In order to show that the first definition of pervasion is too narrow Raghunātha points out that it does not apply to the relation between a non-locus-pervading *sādhya* and any *hetu* related to its locus by an occurrence-exacting relation like contact, inherence, etc. According to Jagadīśa this is because this first definition of pervasion applies to the relation between a non-locus-pervading *sādhya* and a *hetu* which does not occur anywhere at all (such as *ākāśa*). Therefore, in order to show that the definition of pervasion is too narrow, Raghunātha has to consider cases where the *sādhya* is non-locus-pervading and the *hetu* is an occurrent.

(E95-100) The second definition of pervasion as given by Gaṅgeśa (viz. non-deviation is the non-occurrence of the *hetu* in a locus of absence of the *sādhya* which is different from a locus of the *sādhya*) admits of two interpretations. On the first, call it (2a), pervasion is the non-occurrence (of the *hetu*) in a locus of an absence of the *sādhya*, which absence is present in something which is not a locus of the *sādhya*. On the second, call it (2b), pervasion is the non-occurrence (of the *hetu*) in a locus of an absence of the *sādhya*, which locus is not a locus of the *sādhya*. Now let us analyze these two interpretations.

[1]In dealing with the five definitions of pervasion discussed in the present section we replace Madhusudana Nyayacarya's translations with those used in EnInPh Volume Six to make it easier to relate text with commentary.

Analysis of (2a): (i) First we have to select an entity, say *e*, which is different from every locus of the *sādhya*. (ii) We have then to select an absence of the *sādhya* occurring in *e*, say *a*. (iii) Pervasion, then, will be the non-occurrence (of the *hetu*) in any locus of *a*.

Analysis of (2b): (i) Same as in (2a). (ii) We have to find a locus of the absence of the *sādhya*, and this locus, call it *w*, should be identical with *e*. (iii) Pervasion then will be the non-occurrence (of the *hetu*) in *w*.

Raghunātha rejects (2b). Jagadīśa says that, if we accept this interpretation, then the phrase "locus of the absence of the *sādhya*" becomes superfluous. This can be easily seen from the analysis of (2b). (2b) is redundant, for every *e* (i.e., every entity different from every locus of *s*) is necessarily a *w* (i.e., a locus of absence of the *sādhya*.) Hence, this interpretation is not acceptable.

There is a difficulty even on the first interpretation. Take, e.g., the valid inference "this is monkey-contact-possessing because it is this tree". Here the *sādhya* is contact with the monkey, and the *hetu* is this-tree-ness. Here one may argue as follows: (i) We first choose a quality, say a red color, as an entity different from the locus of the *sādhya*. This red color is to be the *sādhya* in this case. (ii) We then choose, as an absence of the *sādhya* (i.e., as *a*) this absence of the *sādhya* in *e*. A quality according to Nyāya cannot be a locus of another quality. So red color cannot be a locus of contact, and absence of contact will have red color as its locus. Because contact is non-locus-pervading, it is both present and absent in this tree. The question to be answered here is whether the absence of contact with the monkey which occurs in this tree is the same absence which occurs in the red color. If we accept the usual theory of absence we shall have to say that these two absences are identical. The standard Nyāya theory of absence is that absences differ if and only if either their counterpositives or the

counterpositive-nesses of those counterpositives differ. A mere difference in the loci will not make the absences different. In the present example we have merely a difference in the loci of the two absences: absence of contact with monkey in the red color and absence of contact with monkey (the same absence as before) in this tree. Hence these two absences are identical. But then this tree which is a locus of the *hetu* becomes a locus of the absence of *s*, and so the definition of pervasion fails to apply to the relation between this-tree-ness and contact-with-monkey, and becomes too narrow.

To avoid this difficulty Jagadīśa points out that this definition of pervasion is formulated on the theory that absences differ when their loci differ. If we accept this theory, then we cannot say that the absence of contact with monkey occurring in the red color is the same as the absence occuring in this tree. This tree, therefore, cannot be regarded as a locus of absence occurring in *e*, i.e. a locus of *a*. So, even if the *hetu* occurs in this tree, there is no harm. (Jagadīśa further points out that this definition of pervasion has another assumption: the law of double negation does not hold here.)[1]

Thus the second definition is rejected because the theory

[1]This theory that absences differ if their loci differ is not generally accepted. Mathurānātha argues that it is not necessary to accept here the general doctrine that *all* absences differ if their loci differ. To solve the difficulty of this definition of pervasion, it is sufficient to subscribe to the restricted doctrine that only in special cases do absences differ if their loci differ. He says there is no difficulty in holding the view that only those absences which have two contradictory properties, such as locus-pervading-ness and non-locus-pervading-ness, will differ if their loci differ. The point is that a negation occurring in a particular locus will be locus-pervading and occurring in another locus will be non-locus-pervading, and thus the contradiction will be resolved. But then the two absences will be different. In the present example, absence of contact occurring in the red color is locus-pervading, for in the red color only the absence occurs. The absence of contact occurring in this tree is non-locus-pervading, for contact also occurs in this tree. So the two absences are, according to Mathurānātha, different. But Jagadīśa rejects this theory. He points out that *every* absence possesses contradictory properties. Therefore the attempt to distinguish between absences which do and absences which do not possess contradictory properties is bound to fail. Jagadīśa points out that even the absence of *ākāśa*, e.g., possesses contradictory properties. When this absence occurs in a quality, it has the property of occurring in a quality, but when it occurs in a substance, it has the property of not occurring in a quality. Hence it possesses contradictory properties.

that absences differ if their loci differ is unjustified.

(E101-102) The third definition runs thus: Non-deviation is the *hetu*'s not having the same locus as a mutual absence whose counterpositive is a locus of the *sādhya*. This definition can be analyzed in the following way: (i) First we have to choose a mutual absence, say *a*, whose counterpositive is a locus of the *sādhya*. (ii) The *hetu* will be pervaded by the *sādhya* if and only if the hetu does not occur in any locus of *a* (i.e., the mutual absence described in (i)).

Raghunātha Śiromaṇi, however, rejects this definition of pervasion as too narrow. Take, e.g., the relation between smoke and fire (where smoke is the *hetu* and fire is the *sādhya*). Now fire occurs in many loci, so we may choose a particular fire, say a hill-fire, the locus of which is a (certain) hill, so that that hill is the *pakṣa* in this inference. But this hill is different from another locus of another fire, say a kitchen-fire. Smoke thus occurs in the kitchen which is different from the hill as a locus of fire. This means that the kitchen is a locus of a mutual absence, is different from the hill which is a locus of the *sādhya*. Hence the definition of pervasion does not apply to this relation and is too narrow.

Jagadīśa points out that in this way the definition will be impossible as it will fail to apply to *any* case. Why, then, does Raghunātha say that it is too narrow? The answer is that there is at least one case of pervasion to which this definition applies, namely, where *ākāśa* is the *hetu* and fire is the *sādhya*. As *ākāśa* does not occur *anywhere*, it does not occur in any locus other than a locus of the *sādhya*. Hence the definition will apply to this case and will not be impossible.

(E103-120) Now we come to the fourth definition of pervasion (viz. non-deviation is the *hetu*'s being the counterpositive of an absence which resides in all loci of absence of the *sādhya*), which can be interpreted in three ways: (4a) Pervasion is the *hetu*'s being the counterpositive of an absence which resides in a locus of *all absences* of the *sādhya*; (4b) Pervasion is the *hetu*'s being the counterpositive of an absence which resides in *all loci* of absence of the *sādhya*; (4c) Pervasion is the *hetu*'s being the counterpositive of an absence which resides in *all loci* of absence of *all sādhyas*.

The first interpretation, (4a), cannot be accepted, for it makes the definition of pervasion too narrow. In the case of the relation between smoke and fire, e.g., there are many different absences of fire, and *all these* absences cannot have the same

locus. E.g., there is absence of fire which absence occurs in the kitchen, namely, the absence of hill-fire. Then there is absence of fire which absence occurs in a lake. Now the kitchen is the *sapakṣa* and the lake is the *vipakṣa* in the inference about the hill having fire, and no *sapakṣa* can ever be identical with the *vipakṣa* of the same inference. Hence an absence which occurs *only* in the *vipakṣa* and an absence which occurs *only* in a *sapakṣa* can never occur in one and the same locus. Thus one locus of all absences of the *sādhya* is impossible and so (4a) is rejected.

The second interpretation, (4b), avoids the above difficulty by regarding "all" as an adjective modifying "loci" rather than "absence". Still, it cannot be accepted, for it too makes the definition of pervasion too narrow. For by the law of sieve even the kitchen will be included in all loci of the absence of fire, yet smoke is present there, i.e., smoke will not be a counterpositive of an absence which resides in a locus of absence of the *sādhya*.

To avoid this difficulty the word "all" has been regarded as an adjective of "loci" as well as of "*sādhya*" in (4c). In this way we can avoid the difficulty created by the law of sieve. For even though the kitchen has *only* kitchen-fire, not any other fire, still the kitchen cannot be regarded as something where all fires are absent. Hence this third interpretation seems satisfactory. But there is a technical difficulty here. According to the rules of syntax a word pronounced (written) *once* cannot be construed more than once. So (4c) has to be rejected also, for here "all", which is used only once in the definition, is construed twice, once as an adjective of "loci" and again as an adjective of "*sādhya*". Yet it is clear that *somehow* this meaning has to be got out of the original wording of the definition. This is done by Raghunātha through interpreting "absence of the *sādhya*" to mean "absence of *sādhyas* in general". This has the effect of saying "absence of all *sādhyas*" without using the word "all". The word "all" thus remains the adjective only of "loci". Raghunātha also points out that "the counterpositive of an absence" in "(the *hetu*'s) being the counterpositive of an absence" occurring in the definition has to be interpreted to mean an absence whose counterpositive-ness is limited by the limiter of the *hetu*-ness. Jagadīśa adds that the counterpositive-ness has to be limited also by the limiting relation of the *hetu*-ness.

Criticism of (4): The adjective "all" (in "all loci") may be

interpreted in two ways to mean (1) plurality and (2) pervasion. On reading (1), where "all" is taken as an adjective of "locus", then the definition of pervasion becomes too narrow, for it cannot apply to cases where the locus of absence of the *sādhya* is only one. E.g., in the inference "this possesses a property absent from *ākāśa*, because this is other than *ākāśa*", the *sādhya* is the property of being absent from *ākāśa*, its absence is the absence of the property absent from *ākāśa*, and that is identical with the property of being *ākāśa*. The locus of absence of the *sādhya* (i.e., the locus of the property of being *ākāśa*) is *ākāśa* itself, which is single. Hence the definition of pervasion will not apply to this case.

If, however, we accept reading (2) of "all" (upon which "all" indicates pervasion) then the definition of pervasion will apply to this case also, because the locus-ness of absence of the *sādhya* will be pervaded by the absence whose counterpositive-ness is the *hetu*, and the limiter of counterpositive-ness is the pervasion. This means that wherever the locus-ness is present the absence will occur; it does not matter if the locus (i.e., the place where the locus-ness occurs) is only one in number. But this meaning, too, cannot be accepted. For it makes the definition of pervasion too narrow. The definition will not apply to cases where the absence of the *sādhya* is not one entity but many entities and the absence of the *hetu* is also not one but many entities. In such cases we can show by the law of sieve that the locus-ness of the absence of the *sādhya* is not pervaded by the absence whose counterpositive is the *hetu*. Hence this definition of pervasion, too, is rejected.

(E121-140) So we come to the fifth definition of pervasion stated by Gaṅgeśa (viz. non-deviation is the *hetu*'s non-occurrence in what is other than the locus of the *sādhya*). This definition, as it stands, is too narrow, for it does not apply to cases where the *sādhya* is not one entity but many particular entities. Thus where fire is the *sādhya* and smoke the *hetu*, we may say that smoke occurs in the kitchen which is other than the hill which is a locus of fire. Smoke also occurs in the hill which again is other than the kitchen which is a locus of fire. In this way smoke occurs in what is other than a locus of fire. Therefore the definition of pervasion fails to apply to the relation between smoke and fire and becomes too narrow. Raghunātha, therefore, interprets this definition thus: Pervasion is the non-occurrence of the *hetu* in what is other than *all* loci of the *sādhya*. Jagadīśa points out that this interpretation avoids

the difficulty mentioned above. For although the kitchen is other than the hill, yet we cannot say that the kitchen is other than (i.e., is not) a locus of fire.

Raghunātha, in justification of his interpretation, raises the problem of the meaning of the phrase "other than" when followed by expressions meaning something possessing something. This problem arises because in the definition of pervasion the expression "what is other than the locus of *s*" occurs. There are two types of expressions which mean otherness: "mutual absence" and "difference". The first type contains "other than" or "different from" or their synonyms but does not involve the word "not" or other relevantly negative expressions. The other type does involve such an expression. Thus, to mean that a jar is different from a piece of cloth we may say either (i) "a jar is other than (or different from) a piece of cloth", or (ii) "a jar is not a piece of cloth".

Jagadīśa gives an analysis of each type of expression. As to the first type, Jagadīśa points out that there are certain rules for the use of expressions of this sort. According to Navya-Nyāya, expressions like "a jar is different from a jar" are not false but meaningless; they are meaningless because they violate a rule of language. The rule--call it rule of significance R1--is this: Only a property which does not occur in the counterpositive of a mutual absence can be the limiter of the locus-ness of that mutual absence. Now in the expression "a jar is different from a jar" jar is the counterpositive of difference (i.e., mutual absence), but it is also the locus of this absence. The limiter of the locus-ness of this mutual absence is therefore jar-ness, but jar-ness is a property which occurs in the counterpositive. Hence this expression is meaningless. So also in the expression "substance is different from a jar". Here substance is the locus of difference and jar is the counterpositive. But as a jar is a substance, substance-ness (the limiter of the locus-ness) occurs in the counterpositive and thus R1 is violated.

Now let us consider another type of expression, e.g., "a blue jar is different from a jar". According to Navya-Nyāya expressions of this type are also meaningless, yet they do not violate R1. For the two properties, blue-ness and jar-ness, together constitute the limiter of the locus-ness of this difference, but both are not present in the counterpositive, which is simply a jar. Yet it is clear that we cannot say that a blue jar is not a jar at all. So another rule of significance, R2, is formulated to explain why expressions of this type are meaningless. R2 says in effect: expressions of the form "x is different from y-ness-possessing" mean "x is different from anything which possesses y-ness (i.e., from every y)". This explains why the expression "a blue jar is different from a jar" is meaningless, for we cannot say that a blue jar is not a jar at all, or that a blue jar is different from *every* jar. Jagadīśa points out that, as we have to accept R2 in order to explain why expressions like "a blue jar is different from a jar" are meaningless, Raghunātha is justified in interpreting the expression "other than what possesses the *sādhya*" to mean "other than whatever possesses the *sādhya*".

Now as to expressions of the second type. After explaining Raghunātha's position, Jagadīśa shows how to interpret expressions containing "not" to mean a difference or mutual absence. Expressions can be divided into two classes: (1) expressions consisting of a single word, and (2) those consisting of more than one word. Here we are concerned with expressions of the second class, i.e. with expressions consisting of more than one word. In an expression of this type the words have to be grammatically related in such a way that the meanings of these words are also related coherently. Now the meanings of the word occurring in an expression can be related in two ways: (a) by the relation of identity and (b) by the relation of difference. A fundamental rule (FR) is that meanings of two names other than particles (*nipāta*) occurring in an expression have to be related by the relation of identity. The meaning of a particle, however, can be related to that of a name by the relation of difference. Thus the expression "*nīlaghaṭaḥ*" ("the blue jar") produces the awareness that the blue thing (the meaning of the adjective "blue") is identical with the jar (the meaning of the noun "jar"). Here both "*nīla*" and "*ghaṭa*" are names and not particles.

So also in the expression "other than (*anyat*) the *sādhya*-possessor" the words "*sādhya*-possessor" and "other than" are names and not particles; hence the meanings of these two words have to be related by the relation of identity. Now a part of the meaning of "*anyat*", "other than", is difference. How can it be related by the relation of identity with the *sādhya*-possessor? We have to take here the indirect meaning of this word. Jagadīśa says that this indirect meaning is as follows: that which has the *sādhya*-possessor as its counterpositive. Now there is no difficulty in identifying difference with this entity,

for we can easily say that this difference is identical with that which has the *sādhya*-possessor as its counterpositive. In other words, in an expression of the form "different from x", the meaning of the term occupying the position of "x" will be that of which it is the counterpositive. Thus we find that expressions containing "other than" (*anyat*) and another name (other than *a nipāta*) cannot be interpreted literally. We have to take the indirect meaning (*lakṣaṇikārtha*) of at least one term.

But when we come to expressions containing "not" the situation becomes radically different. The word "not" is a particle, hence its meaning can be related by the relation of difference to the meanings of other words occurring in the same expression. Consider, e.g., the expression "a jar is not a piece of cloth". Here the difference is the meaning of "not", but this difference is not to be identified with a piece of cloth which is the meaning of "a piece of cloth". Hence there is no need here to take an indirect meaning of any word. Thus the difference between two types of expressions, one containing "not", the other containing "other than", is grammatically fundamental.

51.160.3. *Siṃhavyāghra*

51.160.4. *Caturdaśalakṣaṇī*

51.160.5. *Vyadhikaraṇa*

51.160.6. (*Pūrvapakṣa*- and) *Siddhāntalakṣaṇa*

In addressing this section we depend on the work of A. K. Mukherjea, who has studied this section in his article "The definition of pervasion (*vyāpti*) in Navya-Nyāya", Journal of Indian Philosophy 4, 1976, 1-50 and 7, 1979, pp. 107-152, which is our "ET". (References in what follows preceded by "4" and "7" indicate which volume is being referred to.) Mukherjea provides the Sanskrit text together with an extensive analysis of the meaning of each portion in order, from which we have drawn in trying to provide an intelligible summary. Note that what follows here is a summary, not a translation, and that not all of the points made by Jagadīśa are reflected in what is found below. Sections are numbered following Mukherjea's lead. Kali Krishna Banerjee's summary of Raghunatha's commentary in EnInPh Volume Six, p. 556ff., is referred to as "KKB" followed by the page number.

1 (ET4.18-22) "Raghunātha's commentary on Gaṅgeśa's definition, though intended to be an interpretation of it, is virtually a re-statement. Jagadiśa makes no effort to retain the generality of the definition of *vyāpti* which Gaṅgeśa suggested. Right from the beginning he deals only with the special case of *vyāpti* between *hetu* and *sādhya*.

"Jagadiśa points out that *vis-a-vis* an example of valid inference...where the *sādhya* can be any one of many particular individuals, Gaṅgeśa's definition cannot be applied, because of the fault of *avyāpti*. Jagadiśa suggests...that Raghunātha, instead of using Gaṅgeśa's words,...has slightly modified the definition...only to avoid the difficulty...Jagadiśa does not himself demonstrate how the difficulty is avoided by the alteration suggested by Raghunātha. [Mukherjea endeavors to do so on p. 22].

2 (ET4.22-25) "Jagadiśa...anticipates a possible objection to Gaṅgeśa's definition: In 'this possesses fire because it possesses smoke' oven-fire is absent on the hill (which is the locus of the *hetu* [viz. smoke]. Therefore, absence of oven-fire may be taken as an absence residing in a locus of *h* (cf. KKB 556). Then, fire-ness, like the 'quality of belonging to an oven'...is also" such an absence. But fire-ness is the limiter of the *sādhya*-ness. Hence, we cannot possibly get fire-ness which is the limiter of the *sādhya*-ness as an absence residing in a locus of the *hetu*. Hence, it is not possible to apply the definition in spite of Raghunātha's alteration.

"To meet this objection, Jagadīśa suggests the insertion of a qualifying phrase in Raghunātha's altered definition. Jagadiśa does not show in his text how this insertion helps avoid the difficulty... (though Mukherjea helpfully does indeed do so).

3 (ET4.25-26) "At this stage, however, Jagadiśa anticipates yet another objection to the definition...The argument 'This has the property of possessing the object to be known (*prameyatvavatvān*) because of smoke (*dhumāt*) is an instance of valid inference....Therefore, Gaṅgeśa's definition" (as amended above) "should apply. But in fact it does not–which shows that the definition suffers from *avyāpti*, i.e., it is not wide enough. Since everything must, in the nature of things, be a *prameya*, i.e., an object of cognition, there cannot be anything which is not a *prameya* and it follows that Gaṅgeśa's definition [requiring 'something else'] is not a possible concept at all" [in this instance]. Hence, it is manifestly impossible to apply the

definition as modified by Jagadīśa [as in 2 above] to the particular case of valid inference. One of the elements of such a definition becomes a logical impossibility.

"Jagadīśa has an answer to this objection. (He) meets the objection by suggesting two alternative interpretations of the word 'something else' [in Gaṅgeśa definition].

4 (ET4.26-27) "By the term '*taditara*' [that is, 'something else'] one is to understand 'that, the content-possessor-ness (*viṣayitā*) of which is a non-pervader of being the content-possessor of that (*tadviṣayitva*).

"After giving his own answer to the objection of the *pūrvapakṣa* Jagadīśa mentions two other alternative solutions and goes on immediately to show the defects of those solutions–obviously for suggesting the superiority of his own solution..."

[Sections 5-10 (ET4.27-36) consider two other possible solutions which might be suggested to answer the previous objection; Jagadīśa rejects them.]

11-14 (ET4.36-38, which Mukherjea summarizes on p. 47 as follows:) "Jagadīśa justifies Raghunātha's use of the phrase *taddharmāvacchinena*" [in Raghunātha's revised definition] "by saying that this phrase makes sure that the equilocation (*sāmānādhikaraṇya*) referred to is of fire-in-general (*sāmānyato vahni*) and not of any particular fire (*tattaddharmāvacchinna vahni*).

12 (ET4.*39-41*) "Jagadīśa then proceeds to explain why Raghunātha qualifies the word *vyāpti* with the expressions (i) *tad-rūpa-viśiṣtya* and (ii) *taddharmāvacchinna-nirūpitā*. Jagadīśa suggests that (i) excludes equilocation of fire from smoke *qua* substance and (ii) excludes equilocation of particular fire (as opposed to fire-in-general).

13 (ET4.41-44) "Jagadīśa gives his own meaning to the word *vyāpti* (the *definiendum*) and suggests that he has done so to avoid tautology.

14 (ET4.44-46) "Jagadīśa then explains why Raghunātha uses the words *yena kenāpi* and *yavāt* in his restatement.

15 (ET7.111) "But now there will be non-pervasion of the definition (in regard) to the argument '*daṇḍīmān daṇḍisaṃyogāt*' [i.e., "(he is a) staff-holder because of (his) holding a staff"], because, by the method of sieving out, each and every staff is in this argument the limiter of the counterpositive-ness."

16 (ET7.111-121) This complex section defies summary.

Mukherjea characterizes it as the words of a "demurrer" who endeavors to show that the objection in 15 poses no real problem.

17-21 (ET7.121-137) "The real point that emerges out of all preceding arguments ([i.e, those offered in the present section]...is quite simple [involving] "the principle of elimination by a sieve (*cālanī-nyāya*). In regard to the inferential statement '*daṇḍimān daṇḍi-saṃyogāt*', the problem arose because the limiters of the counterpositive-ness were many and various, viz. that staff, a blue staff, the other staff [etc.]. Raghunatha has provided–in a rather arbitrary fashion–a solution to this problem by postulating the 'staff-hood' as the limiter of the counterpositive-ness in this case. 'Staff-hood' being one–the difficulty is, for obvious reasons, at once avoided. Jagadīśa suggests that though the narrowness of the definition in regard to the statement '*daṇḍimān daṇḍisaṃyogāt*' may be avoided by one insertion....there are other examples where the defect caused by the plurality of limiters of the counterpositive-ness is unavoidable in spirt of such insertion.

22 (ET7.138-140) "Jagadīśa explains how with 'staff-hood' (*daṇḍatva*) as the limiter of *sādhya*-ness one cannot have inference of the form in which the *sādhya* is qualified by 'staff' (*daṇḍa*), i.e., in the form *daṇḍīmān*. Let us understand this argument of Jagadīśa's.

"(1) Remember that 'limiter to pervader-ness' (*vyāpakatāvacchedaka)* is that which is *not* the limiter of the counterpositive-ness.

"(2) In the statement '*daṇḍīmān daṇḍī-saṃyogāt*', 'staff' *is* the limiter to the counterpositive-ness."

"(3) Therefore, from (1) and (2), 'staff' cannot be the limiter to the pervader-ness."

"But the rule is that the attribute which is the 'limiter of pervader-ness' qualifies the *sādhya* of the inferential statement."

"Since 'staff' cannot be such a limiter [from (3)], the inference cannot relate to a *sādhya* which is qualified by 'staff'."

24-25 (ET7.144-151) Jagadīśa now takes up two other positions on the above subject, which we shall not try to summarize here. However, Kamaleswar Bhattacharya at Journal Asiatique 279, 1991, pp. 324-325, [in addition to offering a summary of the arguments in the previous sections,] sheds further light on the present section: "Jagadīśa's commentary–as usual–is largely based on those of his predecessors....(W)e have noticed all that he owes to Kṛṣṇadāsa

and Bhavānanda. But....it has been possible to trace another source: Mathuranātha's commentary upon the [*Tattvacintāmaṇi*] *Dīdhiti* (see J[ournal] A[siatique] 1988, p. 161), thanks to the cooperation of Dr. Prabal Kumar Sen of Calcutta, who possesses a manuscript of the still unpublished *Dīdhitirahasya*. On one point Jagadīśa takes up Bhavānanda's critique, but parts company with him, taking his base upon Mathuranātha's arguments. He gives two views of the 'moderns' (*navyāḥ*), one of which is to be found in Mathurānātha's commentary as adopted, later, by Gadādhara. (On another point Jagadīśa, in this commentary, dissents from Mathurānātha's interpretation of the *Tattvacintāmaṇi*: in his own commentary....the *Mayūkha*, recently published, he adopts this interpretation.)

"In the end, Jagadīśa raises some points which are not to be found in any other commentary upon the *Siddhāntalakṣaṇa*. On the last point he concludes citing the opinion of his own teacher (Rāmabhadra Sārvabhauma)."

51.160.7. *Avacchedakatva*

"E" refers to the edition by Dundhiraja Sastri in Kashi Sanskrit Series 89, 1931. The entire text has been translated by Yuko Miyasaka in a Ph. D. Thesis submitted at the University of Poona 1980.

The Editor (Sibajiban Bhattacharyya) has prepared the English version of this summary from Visvabandhu's original Bengali, and provided his own analysis and explanations.

Summary by Visvabandhu Bhattacharya

This work is Jagadīśa's commentary on Raghunātha's original text *Avacchedakatvanirukti* (summarized in EnInPh Volume Six pp. 563-564). Raghunātha explains here the nature of a limiter involved in the conclusive definition (CD) of pervasion that is accepted by Gaṅgeśa (see Section Six of Book Two of *Tattvacintāmaṇi*, p. 176 of EnInPh Volume Six.) In CD as modified by Raghunātha the term "limiter" occurs twice: once in "the limiter of the *sādhya*-ness" and again in "the limiter of the counterpositive-ness". Raghunātha in his work attempts to explain the second only--the nature of the limiter of the counterpositive-ness--because there is no problem about the meaning of the term "limiter" as it occurs in "the limiter of the *sādhya*-ness".

In explaining the nature of the limiter of the counterpositive-ness involved in CD, Raghunātha states what the limiter-ness in this context is. For, once we understand limiter-ness, we understand what the limiter is. Raghunātha mentions here two possible ways of interpreting limiter-ness. One way is to hold that limiter-ness is a special type of self-linking connector (*svarūpasambandha*). Another way is to regard the limiter-ness as the property of not being wider than what the limiter limits (*anatiriktatva*). Raghunātha discusses the first interpretation first.

(E1-26) (1) The limiter of the counterpositive-ness involved in CD cannot be defined in terms of self-linking connector. The reason is that, whenever possible, a simpler property rather than a heavier (more complex) one has to be regarded as the limiter in this sense. For instance, a jar possesses the simpler property of jar-ness (a universal property) and also the heavier property of possessing a conch-shaped neck. Smell possesses the property of smell-ness as well as the property of being a quality which can be smelt. The limiters of the counterpositive-nesses of the absences (designated by) "absence of that which possesses a conch-shaped neck", "absence of a quality which can be smelled", and "absence of knowable smoke" are not the property of possessing a conch-shaped neck, the property of being a smellable quality, and knowable smoke-ness, but simply jar-ness, smelled-ness and smoke-ness. If we understand the limiter of the counterpositive-ness in this way, then CD becomes too wide. For example, the property of being an object of (true) awareness is not pervaded by that which possesses a conch-shaped neck. This means that the second entity is not always present where the first property is present. Yet the definition of pervasion will apply to this case, for we shall not be able to cite any instance of an absence (residing in any locus of the *hetu*) the limiter of the counterpositive-ness of which is the property of possessing a conch-shaped neck. For, as explained above, the property of possessing a conch-shaped neck, being heavy, cannot be a limiter of any counterpositive-ness. So also with the other examples given above. Hence limiter-ness cannot be a type of self-linking connector.

(E29-34) (2) An entity is wider than another entity if and only if it is present where the second is absent. It is not wider than the second if this is not the case. To say that limiter-ness is the property of being not wider is to say that the limiter-

ness (of the counterpositive-ness cited in CD) is that which is not wider than the counterpositive-ness. Now, if we understand the term "limiter" in "the limiter of the counterpositive-ness" in this sense, then also CD becomes defective. This is due to the difficulty in understanding the precise meaning of the phrase "the limiter of the counterpositive-ness", which may be understood in a number of ways, discussed under (2.1-2) below.

(2.1) "The limiter is not wider than the counterpositive-ness." This may mean that the limiter is absent in a locus of the absence of all counterpositive-nesses. But this meaning cannot be accepted, for the absence of all counterpositive-nesses is an impossibility. There is at least one counterpositive-ness which is present everywhere. This is the counterpositive-ness of the absence of everything. The counterpositive of that absence is everything, which is to say, the counterpositive-ness of this absence is present in everything.

(2.2) "Not being wider than the counterpositive-ness" may also mean not being present in a locus of particular counterpositive-nesses. So the limiter of a counterpositive-ness, in order not to be wider than that counterpositive-ness, must be present in a locus of an absence of that particular counterpositive-ness. This interpretation avoids the difficulty in (1), for now we are not talking about one absence (i.e., one negative entity) of all counterpositive-nesses, but only about absence of a particular counterpositive-ness of an absence fixed beforehand.

Yet this interpretation cannot be accepted, for it makes CD too wide. In the invalid inference "the *pakṣa* is smoke-possessing because it is fire-possessing", fire-possessing is the *hetu* and smoke-possessing is the *sādhya*. Now counterpositive-ness is not a common property in the sense of being one metaphysical entity present in all counterpositives. Counterpositive-ness is as particular as any particular thing or quality, and varies from counterpositive to counterpositive. This because of the peculiar Nyāya theory of abstraction: every abstract term ending in "-ness" [i.e., in *-tā* or *-tva*] means a property, but not necessarily a common property. In the present case, smoke-ness which is the limiter of the *sādhya*-ness is a universal and hence resides in all particular instances of smoke. The counterpositive of an absence of smoke (this absence is now fixed) is a particular instance of smoke. The counterpositive-ness present in one such instance of smoke is different from the counterpositive-ness present in another instance of smoke. So smoke-ness, which resides in all instances of smoke and thus in the first as well as the second instance, is thus present in something where a particular counterpositive-ness (of the same absence already fixed) resident in the first instance of smoke is absent. Hence smoke-ness is wider than the counterpositive-ness described by the absence of smoke, and hence cannot be the limiter of this counterpositive-ness. If smoke-ness cannot be the limiter of the counterpositive-ness of absence of smoke, then CD becomes applicable to this case and thus becomes too wide. For now we may take any other absence resident in any locus of the *hetu* (fire); the limiter-ness of counterpositive-ness of any such absence will be different from the limiter of the *sādhya*-ness.

(E36-54) (2.3) So we come to the third way of interpreting "the limiter of the counterpositive-ness" occurring in CD. Gaṅgeśa's CD has been shown by Raghunātha to be really two definitions, one for locus-pervading *sādhyas*, the other for non-locus-pervading *sādhyas*. The term "absolute absence" occurring in Gaṅgeśa's CD is to be left out in the first case and is to be retained in the second. The limiter of the counterpositive-ness: occurring in Raghunātha's modified CD has to be interpreted in two ways corresponding to the two different definitions.

Case 1. Locus-pervading *hetu*. (i) First, choose an absence (*a*) occurring in a locus of the *hetu*. (*a*) will describe at least one counterpositive-ness. Now we have to take the absence of all counterpositive-nesses described by (*a*). Let us call this absence the "general absence" of all counterpositive-nesses described by (*a*). This serves to avoid the difficulty in (2) above. (ii) Then choose another absence occurring in the locus of the *hetu*, and take the general absence of the counterpositive-ness described by this absence. (iii) Repeat this process until all absences occurring in every locus of the *hetu* are chosen. (iv) Collect all these general absences (of counterpositive-nesses) obtained in the above manner. (v) Then the limiter of the counterpositive-ness will not be wider than the counterpositive-ness if and only if the limiter does not occur in any locus of this collection of general absences of counterpositive-nesses.

To appreciate the merit of this interpretation we may compare it with that given in (1) above. There the limiter was said to be not wider than the counterpositive-ness if it does not occur where all counterpositive-nesses are absent. The method

was to collect all the counterpositive-nesses (described by absences residing in loci of the *hetu*), and then to negate the collection of all these counterpositive-nesses. This absence itself will be one absence, the absence of all these counterpositive-nesses. The difficulty of this method was that it is impossible to negate all counterpositive-nesses, for there is at least one counterpositive-ness which is unnegatable.

The present method avoids this difficulty by not asking us to collect all counterpositive-nesses and negate them, but by asking us to collect all possible absences of counterpositive-nesses. In cases where there is no special difficulty both of these methods yield more or less the same result. E.g., there are only five things which are to be negated. Then to collect all five and to negate them will give us the general absence (one negative entity) of the five things. On the other hand, if we negate the first thing, and then the second and so on, and then collect all five absences, we again get, in effect, the absence of the five things (although now there is not one absence but five). Thus the essential different between the method described in (1) and the present method lies in this, that while the former asks us to collect all counterpositive-nesses and negate them, the second method asks us to get the absences first and then to collect them. This latter method does not ask us to collect absences which are impossible, while the former asks us to collect all counterpositive-nesses including those which cannot be negated and then asks us to negate the whole lot, which is impossible. Hence this method is better than (1).

(E55-58) There is a section of Naiyāyikas who hold that two different absences occurring in exactly the same loci can be treated as identical.[1] If we accept this theory of identity of absences, then the above definition of the limiter of a counterpositive-ness cannot be accepted. For we shall not be able to get *any* general absence of counterpositive-ness, and hence no collection of such general absences is possible. This can be explained as follows:

The two absences--absence of a jar and absence of knowable objects--are different absences since their counterpositives are different. In the first case the counterpositive is a certain jar, in the second it is knowable

[1]This is really a form of extensionality applied to negative entities. In Western logic the law of extensionality is generally applied to sets or classes.

objects. Yet there is a way of making these two absences co-extensive. The limiting relation of the first absence is simply contact (i.e., the jar is not in contact somewhere). We shall symbolize contact by C. Contact with jar (CJ) will then stand for the contacts that only jars can have to things which will be the first members of C. I.e., let C*ab* stand for "*a* is in contact with *b*", while CJ*ab* stands for "*a* has jar-contact with *b*". Suppose in both cases "*b*" is the name of a particular jar. Now if we make this relation CJ (instead of merely C) the limiting relation of the counterpositive-ness of the second absence (involving knowable objects) then the loci of that second absence becomes restricted to just those entities which can be the loci of the absence of jar. This is because the things which can be the first members of the general relation C whose second member is jar are exactly the same entities which can be the first members of the more specific relation CJ, whose second member is a knowable object. So we have the following two absences: (1) absence of jar, where the limiting relation of the counterpositive-ness is contact (C); (2) absence of knowable objects, where the limiting relation of the counterpositive-ness is jar-contact (CJ). These absences are co-extensive and thus identical. In this way, by choosing the limiting relation of the counterpositive-ness appropriately, *every* absence can be identified with the absence of knowable objects. But then the counterpositive of every absence becomes all knowable objects, since the counterpositive-ness is the property of being a knowable object, a property which, according to Nyāya, is unnegatable. So if we have to collect all general absences of the counterpositive-ness and if every counterpositive-ness is unnegatable, we have to perform an impossible feat. Thus the method described in (3) is as impossible as that described in (1).

To avoid this difficulty, Jagadīśa points out that this interpretation (3) of "the locus of the counterpositive-ness" is given from the standpoint of only those who do not accept the theory that two co-extensive absences are identical.

(E58-73) Case 2: Non-locus-pervading *sādhyas*. The term "absolute absence" has to be retained in CD to make it applicable to pervasions with non-locus-pervading *sādhyas*. "Absolute absence" means an absence which is not present in a locus where its counterpositive is present. The counterpositive here again must be that which is limited by the limiter of the counterpositive-ness of an absence occurring in a locus of the

hetu. This counterpositive-ness involved in the meaning of "absolute absence", as well as the counterpositive-ness involved in the meaning of "the limiter of the counterpositive-ness" (which is the subject being explained in this work), must be limited by one and the same limiter. Then the limiter of the counterpositive-ness involved in CD is not wider than the counterpositive-ness in the sense that the limiter must not occur in any locus of the general absence of the counterpositive-ness satisfying the following condition: In the case of non-locus-pervading *sādhyas* we have to choose an absolute absence occurring in a locus of the *hetu*; the absence is absolute in the sense that it excludes its own counterpositive; this counterpositive must possess a counterpositive-ness, call it *g*, and the counterpositive-ness in the general absence of the counterpositive-ness must be limited by the limiter of *g*. In simple language this means that the limiter should not be wider than that counterpositive-ness which is limited by the limiter of the counterpositive-ness of any absolute absence occurring in a locus of the *hetu*.

These two definitions of the limiter of the counterpositive-ness involve general absence as an entity separate from the collection of all particular absences. This is one of the reasons why Gaṅgeśa admits general absence (cf. Section Seven of this Chapter of *Tattvacintāmaṇi*).

Criticism of (3): This definition also cannot be accepted, for it makes CD too narrow. Take e.g. the relation of smoke to fire. Here the absences of both fire and jar can be chose as an absence residing in a locus of smoke (the *hetu*). Both fire and jar are counterpositives of this absence and each of them possesses the counterpositive-ness described by this absence; but this counterpositive-ness is not present in, say, a piece of cloth. But fire-ness is also not present in a piece of cloth. Thus fire-ness is not wider than this counterpositive and hence becomes the limiter of this counterpositive-ness. So the limiter of the *sādhya*-ness (fire-ness) becomes the limiter of the counterpositive-ness of an absence (viz. the absence of both fire and jar) occurring in a locus of the *hetu*. Hence CD does not apply here and becomes too narrow. Thus this definition of the limiter of counterpositive-ness has to be rejected.

(E74-101) Solution of the pre-Raghunātha logicians. Raghunātha now explains the definition of limiter of counterpositive-ness as given by interpreters of Gaṅgeśa before him. According to this definition, that which is not wider than the limiter of the counterpositive-ness is the limiter of the counterpositive-ness. This definition looks circular, for the limiter of the counterpositive-ness is defined in terms of the limiter of the counterpositive-ness. But there is no real circularity here, because the limiter in "the limiter of the counterpositive-ness" in the *definiens* is to be understood as a special type of self-linking connector, while the *definiendum* is defined as that which is not wider than this limiter. In (1)-(3) the limiter was defined as that which is not wider than the counterpositive-ness; now it is defined as that which is not wider than the limiter of the counterpositive-ness.

If this definition of the limiter of the counterpositive-ness is accepted there is no difficulty in applying CD to all intended cases and only to them. Now it can be easily shown why the relation of fire to knowable smoke is not pervasion (this is the converse of the relation of knowable smoke to fire, which is pervasion). For, although the counterpositive of the absence of knowable-smoke is knowable-smoke, yet the limiter of the counterpositive-ness (understood as a type of self-linking connector) must be the simplest possible property, and hence only smoke-ness will be the limiter of the counterpositive-ness of the absence of knowable-smoke. Now as knowable-smoke-ness is not wider than smoke-ness (which is the limiter of the counterpositive-ness), so knowable-smoke-ness itself becomes the limiter of the counterpositive-ness according to this definition. Hence CD is not too wide.

Yet there is a difficulty in this definition, for CD becomes too narrow, failing to apply to the relation between smoke (as *hetu*) and fire (as *sādhya*). In determining whether the relation between *hetu* and *sādhya* is pervasion or not, we have to select any absence residing in any locus of the *hetu*. So we select the absence of all fires, for although in every locus of smoke there is one fire, no locus of smoke possesses all fires. Now the limiter (in the sense of self-linking connector) of the counterpositive-ness of this absence is the all-ness residing in fires. But fire-ness is not wider than this all-ness, so fire-ness itself becomes the limiter of the counterpositive-ness according to the present definition. So the limiter of the *sādhya* (fire-ness) becomes identical with the limiter of the counterpositve-ness of an absence occurring in a locus of the *hetu* (smoke); hence CD does not apply to this case and hence becomes too narrow.

To avoid this difficulty Raghnātha first gives two names to the two limiters of counterpositive-ness involved here.

Raghunātha calls the *definiendum* "the limiter in the technical sense" whereas "the limiter of the counterpositive-ness occurring in the *definiens* is called "the limiter in the sense of self-linking connector". Now the difficulty is avoided by stipulating that the limiter in the technical sense and the limiter in the sense of self-linking connector must have identical residence. "Having identical residence" is to be interpreted to mean that the limiter in the sense of self-linking connector must reside in loci by the numerical relation (*paryāpti*) in which loci the limiter in the technical sense resides by the numerical relation. Now the limiter of counterpositive-ness in the technical sense will not be wider than such a limiter of counterpositive-ness in the sense of self-linking connector.

Let us see how this is a way out of the difficulty. Fire-ness was regarded as not wider than the all-ness (the limiter in the sense of self-linking connector of the counterpositive-ness of the absence of all fires). But now we cannot say this, because fire-ness resides in each fire by the numerical relation, whereas all-ness resides in all fires, but not in each fire, by that relation. Hence all-ness and fire-ness cannot be regarded as having identical residence; so fire-ness is not the limiter of the counterpositive-ness and CD applies to the relation smoke to fire and therefore is not too narrow.

Jagadīśa raises an objection to this reply. He points out that the loci in which fire-ness resides by the numerical relation are all individual fires, and the loci of all-ness are also all individual fires. Therefore fire-ness resides by the numerical relation in the same things that all-ness residing in fires resides in. Hence fire-ness and that all-ness have identical residence, and in this way fire-ness (which is not wider than that all-ness) becomes the limiter in the technical sense of the counterpositive-ness of the absence of all fires resident in every locus of smoke. Hence CD fails to apply to this case as before and remains too narrow.

Jagadīśa solves this difficulty by pointing out that although the loci (of fire-ness and the all-ness residing in fires) themselves are identical, yet the limiters of the locus-ness in the two cases are different. In the case of fire-ness each individual fire is the locus, and the limiter of locus-ness is the particularity of the individual fire. In the case of all-ness, the loci are the individual fires, yet the limiter of locus-ness is not the particularity but the totality of all fires. For each individual fire is truly known as a locus of fire-ness, whereas each individual fire is never known as the locus of all-ness (i.e., each individual fire is never known as all fires). So "having identical residence" should be interpreted to mean "having the same limiter of locus-ness of the numerical relation", and not merely "having the same loci of the numerical relation".

Jagadīśa then answers the question: Why not define the limiter in the technical sense as that which has identical residence as the limiter in the sense of self-linking connector? Why is "not wider than" necessary? The reason is this. In the inference "the hill has fire because it has smoke", in the hill which is a locus of the *hetu* there is absence of either kitchen-fire or field-fire. The limiter in the sense of self-linking connector of the counterpositive-ness of this absence is this disjunction (viz. either kitchen- or field-fire). But this disjunction and fire-ness have identical residence, because the limiter of the locus-ness of this disjunction is the particularity of individual fires (i.e., the disjunction is of individual fires), and the limiter of the locus-ness of fire-ness is also the same particularity. Hence fire-ness becomes the limiter in the technical sense of a counterpositive-ness of an absence residing in a locus of the *hetu*, so CD fails to apply to the relation between smoke and fire and is thus too narrow. So we have to add the condition "not wider than". Now we can avoid the difficulty, for fire-ness is wider than the disjunction of particular fires, because fire-ness will be present in fires whose disjunction is not involved.

(E102-110) Then Jagadīśa explains why the numerical relation has to be admitted at all. Can't we get along with inherence alone? Usually the numerical relation is regarded as the relation of numbers beginning from two-ness onwards through the things numbered.[1] A number like two is a quality (belonging to two things), its relation to the things that make

[1]We must note here a difference of the Nyāya concept of number from the usual Western concept. It is usual now to regard a cardinal number as the class of equinumerous classes. The number two, for example, is not any class of two things (i.e., not a pair), but the class of all pairs. According to Nyāya, however, the number two corresponds to the pair, but not to the class of all pairs. Hence there is an infinite number of 2s, all different from one another. The class of all pairs is regarded in Nyāya as a universal common to all these twos, but is not regarded as a number. The number, therefore, is a quality belonging to the things themselves, not to classes of things.

up the pair is inherence. So why do we need another relation, the numerical relation, between two and two things? The usual reply is that two belongs to each of the two things by the relation of inherence, whereas we cannot know truly each thing as two. Hence we need another relation which will relate two to the two things, but not to each thing of the two.

Jagadīśa rejects this view. According to him, if any entity is not related to each of two by a relation it cannot be related to both by that relation. This principle is regarded by Jagadīśa as universally valid, not admitting of any exception. There cannot be any relation which relates two to two things but does not relate it to each of them. So Jagadīśa has to explain why each thing is not known as two. His reply is as follows: Suppose there is a monkey sitting on the top of a tree, so that there is contact of the monkey with the tree only insofar as the tree's top is concerned. If we judge there is contact of the monkey with the tree at the root, our judgment will not be true. The reason is that in the awareness "the tree at the top (is) monkey-contact-possessing" the subject is the tree, and the predicate is monkey-contact, and the property of being restricted to the top is the limiter of the subject-ness (i.e., "at the top" is an adjective of the subject). Although this property is the limiter of subject-ness, yet it also qualifies the relation (inherence) between the subject and the predicate. So also in the case of awareness of the numbers "this and that together are two" this and that are the subject, together-ness is the limiter of the subject-ness. Yet this together-ness also qualifies the numerical relation between the subject and the predicate (two). So the relation between the subject and the predicate is not an unqualified numerical relation, but a numerical relation qualified by the limiter of subject-ness (here, together-ness). Hence we cannot know each thing as two, for although two is present in each thing by the relation of numerical relation, yet this relation is not qualified by together-ness which qualification alone can produce the knowledge of two entities. Hence each thing is never known as two.

This definition of limiter has been offered as the solution to the problem of determining the nature of a limiter by logicians before Raghunātha. But Raghunātha shows that even the definition of a limiter as a special type of self-linking connector can be accepted with certain reasonable modifications. We explain his solution below.

Raghunātha's solution. Raghunātha accepts the definition of limiter in terms of the notion of a self-linking connector. The difficulty of (1) was due to the law that a simpler property should be regarded as the limiter instead of a heavier one. According to pre-Raghunātha commentators on Gaṅgeśa the knowledge that a property is heavy prevents the knowledge that it is the limiter of a counterpositive-ness. But Jagadīśa, explaining Raghunātha, points out that this law has no justification. To establish his point he raises the fundamental question: Why was the notion of a limiter of counterpositive-ness introduced at all? The answer is that we need the concept of a limiter of a counterpositive-ness only because we want to explain the felt relation of opposition between an awareness of an entity and the awareness of the absence of that entity. If we know "absence of jar" it is not clear whether this is opposed to the awareness of "presence of jar", for "absence of jar" says nothing about the quantity--it may mean either the absence of a particular jar or the absence of all jars. So it is not enough to say what the counterpositive of an absence is, but the limiter of the counterpositive-ness also has to be stated. Thus in "absence of jar", where "jar" is known simply as a jar (i.e., as anything which possesses jar-ness) the limiter of the counterpositive-ness is jar-ness. But if the jar has been known as a particular jar or as a substance, then the limiter of the counterpositive-ness of absence of jar will be particularity and jar-ness, or substance-ness. If this be the correct reason for introducing the concept of the limiter of counterpositive-ness, then if anyone knows an absence of that which possesses a conch-shaped neck then the limiter of the counterpositive-ness will have to be the property of that which possesses a conch-shaped neck, even though it is a heavier property than jar-ness. The point is that whatever property (heavy or not) is known as the adjective of the counterpositive will be the locus of counterpositive-ness. Hence Raghunātha contends that even the definition (1) of "limiter" can be accepted.

51.160.8. *Sāmānyābhāva*

51.160.9. *Viśeṣavyāpti*

51.160.10. *Ata eva catuṣṭayam*

51.160.11. *Vyāptigrāhopāya*

51.160.12 *Tarka*

51.160.13 *Vyāptyanugama*

51.160.14 *Sāmānyalakṣaṇa*

51.160.15 *Upādhi*

51.160.16 *Pakṣatā*

"E" references are to the edition by Nyayacarya Pandit Sri Sivadatta Misra, Chowkhamba Sanskrit Series Office, Banaras 1935.

Summary by Sunil Kumar Das

(E1-4) What, besides the awareness of pervasion, occasions an inferential result? This question leads to the determination of *pakṣatā*, defined as conducive-ness to the same effect (*evakāryānukūlatva*), the effect being an inferential result (*anumiti*). The determination of *pakṣatā* after pervasion is in accordance with the principle of consistency (*saṃgati*), which consists in being the content of the awareness causing the desire to know, that being the inducer (*prayojaka*) of the immediately succeeding statement. Now conducive-ness (*anukūlatva*) is the inducive-ness *qua* limiter of the causality (*janakatāvacchedaka*).

There is a view that what induces inference is only this limiter of the causality and not the cause of the inference. As consideration is recognized as the cause of inference, *pakṣatā*, involving consideration, cannot be regarded as the cause, but rather consideration involving *pakṣatā*. Thus *pakṣatā* is the limiter of the cause-ness present in consideration. But this view is insignificant. It is erroneous to think that *pakṣatā* is not the cause of inference, because inference bears the relation of agreement in presence and absence (*anvayavyatireka*) with consideration as well as with *pakṣatā*. An effect is produced not by a single cause but by a conglomeration of causes.

(E5-50) Concerning the first of Gaṅgeśa's three opponent's definitions (see the summary of Gaṅgeśa's commentary on this section in EnInPh Volume Six, p. 193):)

1. The Naiyāyikas of the old school, preceding Vācaspati Miśra, held that *pakṣatā* is being the locus of a *sādhya* that is the object of doubt. But this cannot be right, since if it were so

there could be no inference that, e.g., there is no fire in a lake, since, there being the absence of fire there the *pakṣatā* must also be absent. Hence by "being an object of doubt" must be meant the doubt whether the *sādhya* is in the *pakṣa*.

In an instance of inference where the mountain is the *pakṣa* and fire is the *sādhya*, the inferential awareness of fire on the mountain is admitted if any one of the following varieties of doubting awareness occurs: (i) Is the mountain fiery or not?, (ii) Is there fire on the mountain or not?, (iii) Does fire belong to the mountain or not?, (iv) Is fire a counterpositive of the absence present on the mountain or not? However, if one of these is regarded as the *pakṣatā* none of the rest can be the cause of inference. Hence all these varieties of doubting awareness are to be subsumed under some common characteristic, in order to relate the doubt to the inference resulting as cause and effect. So, the doubt that is prevented by the awareness with certainty of the presence of the *sādhya* concerned is present in the relevant *pakṣa* through a relation limiting the *sādhya*-ness (*sādhyatvācchinnasambandha*). In the decisive awareness of which the relevant *pakṣa* is the content the *sādhya* concerned is the chief qualifier and the two are related by the relevant relation limiting the *sādhya*-ness. Thus all the varieties of doubt can be subsumed under one common characteristic, prevented-ness (*pratiṣiddhatva*), and the cause-effect relation between *pakṣatā* as doubt about the *sādhya* and the inferential result can be understood accordingly.

Now, it may be appreciated that if the doubt that is prevented by the decisive awareness of the relevant *sādhya* be the cause of the inference that that *sādhya* is in that *pakṣa*, then the doubt "Is the fireless mountain colorful or not?" would become the cause of the inference of fire on the mountain because, since fireless-ness is a qualifier of the mountain--the qualificand of the doubt, there is prevented-ness of doubt by the decisive awareness of fire on the hill, and both color and absence of color being opposite sides of the awareness being qualifiers of the mountain, the awareness concerned has been an instance of doubt as well, and so the definition is satisfied. Hence the definition being too wide becomes fallacious.

This problem may be removed by saying that by "doubt" is intended the decisive awareness of the *sādhya* in the *pakṣa* which is qualified by the absence of being an awareness limiting the preventer-ness (*pratibandhakatāvacchedakaviṣayitā-śūnyatva*), and as a result the meaning of the definition of "a

doubtful *pakṣatā*" will read as follows: A doubtful *pakṣatā* consists in being an awareness which is prevented by the ascertaining of the *sādhya* concerned in the particular *pakṣa* and which is devoid of the awareness-hood that is the limiter of the preventer-ness determined by the prevented-ness present in such an ascertainment. In the doubt "is the fireless hill colorful or not?" there is present prevented-ness by the ascertainment of the presence of the *sādhya* in the *pakṣa*, but the other part of the definition--absence of awareness-hood that is the limiter of the preventer-ness determined by the prevented-ness present in such an ascertainment--is not satisfied; hence, there is no scope for the fallacy of being too wide in the revised definition.

Still the objection may arise that such a revised definition is also subject to the fallacy of over-extension in the case of the doubt "is the hill fiery or not?" when there is the inference to "the hill is possessed of that which is pervaded by fire". Because in that doubt there is prevented-ness by the ascertainment of the presence of the *sādhya* in the *pakṣa* as well as the absence of awareness-hood that is the limiter of the preventer-ness determined by the prevented-ness present in such an ascertainment. To meet this objection, the prevented-ness is to be qualified by either "the possessor-ness of the mode limited by the generic property of the absence of the *sādhya*" or "the qualificand-ness of the *sādhya*".

But Gaṅgeśa does not accept the view that *pakṣatā* is doubt about the *sādhya*'s presence. That doubt cannot be the direct cause of inference, because in the cases where, after such doubt occurs, consideration is produced by an awareness of the *hetu* or remembering the pervasion of the *hetu* by the *sādhya*, etc., doubt ceases before inference results. It cannot be even the indirect cause of inference, because in that case it would be dispensable. If it is said that inference and doubt about the *sādhya* are causally related by a temporal relation, then Maitra's doubt would have to be regarded as the cause of Caitra's inference, which is absurd. Again, in certain cases there is inference even in the absence of doubt, as for instance, when a person lying in bed inside a room infers that the sky is cloudy simply on hearing the sound of the roaring of the wind, without having the doubt "Is the sky cloudy or not?". Thus there is the inference "the sky is cloudy" even though it is not preceded by any doubt such as "is the sky cloudy or not?". Hence, in such cases of inference, doubt about the *sādhya* cannot be regarded as the *pakṣatā* because of negative deviation (*vyatireka-*

vyabhicāra, i.e., the violation of the principle that all cases of the absence of the cause must be cases of the absence of the effect).

2. (On the second of Gaṅgeśa's opponent's definitions:) This view is not acceptable since fitness cannot be determined.

3. (On the third opposing definition:) According to a definition provided by Uddyotakara and Vācaspati Miśra, *pakṣatā* is the desire to infer a specific *sādhya* to be present in a specific *pakṣa*. But this view is not acceptable to Gaṅgeśa because here also there is negative deviation of the sort illustrated in the cloudy sky example.

That answer can be met by saying that before inferring there is the desire to infer in God, and this is included in the desire to infer of the present definition. But in that case there would arise the problem about Caitra's inference being caused by Maitra's desire to infer, which is absurd. Furthermore, the desire to infer that is regarded as being the *pakṣatā* being indicated (*upalakṣita*) by the inferential result, there can be no inference in the absence of the establishment (*siddhi*) of the thesis. Moreover, it is only after one inferential result that another inferential result may be produced.

In order to get rid of the above-mentioned difficulty it is suggested that the definition specify that the argument has fitness to be desired to infer (*siṣādhayiṣāyogyatā*). But this definition is also rejected by Gaṅgeśa on the ground that fitness cannot be determined.

(E61-192) Gaṅgeśa's preferred definition is: The *pakṣa* is that with respect to which there is absence of any instrument of knowledge of the presence of the *sādhya* coupled with the absence of the desire to infer.

If the phrase "instrument of knowledge of the presence of the *sādhya*" is taken to mean that such an instrument is the cause of the inferential awareness then the definition becomes subject to the fallacy of impossibility because, in that case, the instrument of knowledge would be awareness of pervasion together with consideration, and *pakṣatā* being the absence of such an instrument, the counterpositive of that absence--awareness of pervasion plus consideration--would be the instrument of knowledge of the presence of *sādhya*, and although both these are causes of inference as the joint counterpositive of the absence they would be preventers of inference. As a result, in "the hill has fire because it has smoke", since awareness of the pervasion of smoke by fire and of

consideration will be regularly present, there will never be any scope for an inference!

With a view to eradicating such a fallacy, Raghunātha Śiromaṇi has said that the real implication of the word "instrument of knowledge of the presence of the *sādhya*" is the decisive awareness of the presence of the *sādhya* in the *pakṣa*.

Now the phrase "desire to infer" in Gaṅgeśa's definition actually means the desire to have inferential awareness of the *sādhya* concerned, and the phrase "coupled with" means "having the relation of being in the same locus with", so the whole phrase means the absence of the desire to have inferential awareness of the *sādhya* being related to the decisive awareness of the *sādhya* through the relation of having the same locus. Thus *pakṣatā* is the absence of the decisive awareness of the *sādhya*'s being qualified by the absence of the desire to have inferential awareness of the *sādhya* through the relation of having the same locus.

In this definition "absence of desire to infer" is the qualifier of "that with respect to which there is (establishment of the *pakṣa* in the *sādhya*)" (*siddhi*), which is the qualificand. The word "absence of" means absolute absence. Hence the implied meaning of this definition is that, wherever there is the absence of establishment qualified by the absence of the desire to infer, there there is *pakṣatā* as the cause of inference. Such absence of establishment qualified by absence of the desire to infer may occur in three ways: (i) where at the time of consideration there is no absence of the desire to infer but there is establishment; (ii) where the absence of the desire to infer is present, but the establishment of the *pakṣa* in the *sādhya* is absent; (iii) where both absence of desire to infer and establishment of the *pakṣa* in the *hetu* are absent.

According to Gaṅgeśa the establishment of the actual *sādhya* in the actual *pakṣa* is the preventer of the inferential awareness of that *sādhya* in that *pakṣa*. Thus when that preventer is itself prevented by the establishment of the *pakṣa's* having the *sādhya* along with the simultaneous presence of the desire to infer, inference occurs. It is to be noted here that, according to the Naiyāyikas, just as the effect, burning, has fire as its cause, so does it have as its cause the absence of a certain kind of jewel (*candrakāṇtamani*), etc. as well. If the absence of that kind of jewel be the cause of burning, then the counterpositive of that absence will be the preventer of burning (our effect), because according to Nyāya the counterpositive-

ness of the absence that is the cause of an effect has the characterizing property of the preventer. Again, if along with the preventer-hood that lies in that jewel its opposer or contradictory jewel (*sūryakāntamaṇi*) that is the exciter is present, then the effect burning can be produced by fire. Hence, just as fire is regarded as the cause of burning, so the absence of Candrakāṇṭamaṇi qualified by the absence of the exciter Sūryakāntamaṇi is also regarded as its auxiliary cause. In the same way, in the case of *pakṣatā*, the absence of establishment of the *pakṣa* in the *sādhya* being the cause of inference, that establishment is to be regarded as the preventer of inference, and the desire to infer that is the opposer of the preventer-hood of inference that lies in that establishment would be the exciter. Thus just as the absence of Candrakāṇṭamaṇi qualified by the absence of the exciter Sūryakāntamaṇi is the cause of burning, so the absence of establishment qualified by the absence of of the exciter desire to infer constitutes the cause of the inference "the hill is fiery".

Raghunātha and Jagadīśa have explained Gaṅgeśa's conclusive definition of *pakṣatā* from the point of view of the cause-effect relation between *pakṣatā* and the inferential result, both of which are located in the self, the inferential cognizer. From this point of view the effect as the inferential awareness of the actual *sādhya* in the actual *pakṣa* being present in the self through the relation of inherence, the limiting relation of effectness would be inherence, and the cause as the absence of establishment, being present in the same self through the self-linking connector of absential qualifier-ness (*abhāvīya viśeṣaṇatā*), would be the limiting relation of the cause-ness. Thus, *pakṣatā* as the absence of establishment qualified by the absence of the desire to infer, located in the self through self-linking connector, would be the cause of the inferential result located in the same self through self-linking connector.

It would be unjust to suppose that the absence of the desire to infer as common to all relevant cases may be taken as the qualifier of the establishment in the definition, because if, in the cases of inferences like "the hill is fiery", only the desire "let there be the inferential awareness of fire on the hill" were regarded as the exciter of the preventer-hood residing in the establishment, in that case the absence of desire to infer as common to all relevant cases could be taken as the qualifier of establishment, but as a matter of fact, just as desire to infer of the form referred to is the exciter here, so desire to infer of the

form "let there be non-perceptual awareness of fire on the hill", as well as of the form "let there be non-verbal awareness of fire on the hill", are also exciters of the preventer-hood residing in the establishment and as such, the conglomeration of absences of inference must be regarded as the qualifier of the establishment.

Now, the question arises: Do all those absences of desire to infer qualify the establishment consecutively or simultaneously? If the former, then the qualifier of establishment will be "qualified by the first absence of desire to infer qualified by the second absence of desire to infer qualified by the third absence of desire to infer", so that the *pakṣatā* becomes the absence of establishment qualified by the third as qualified by the second as qualified by the first! Since the relation among these absences and other things cannot be inherence, two kinds of relations--self-linking connector and inherence--have to be invoked in determining the occurrence of all these in the same place, and this violates the principle of economy. Hence Jagadīśa says that the sum of all the absences of desire to infer is to be taken as qualifying establishment simultaneously, and the absence of establishment simultaneously qualified by all the absences of desire to infer as the absence of the preventer would the *pakṣatā* which causes the inferential result.

Although Raghunātha understands by the phrase "*sādhakapramāṇa*" occurring in the conclusive definition of *pakṣatā* "the decisive awareness of the actual *sādhya* in the actual *pakṣa*", Jagadīśa finds fault with this and takes the word in the sense of the awareness which is the determiner of the subject-hood, limited by the limiter of the *pakṣatā*, the subject-hood that is not determined by the predicate-hood other than the predicate-hood limited by the limiter of the *sādhya*-ness. In this the decisive awareness of the presence of the *sādhya* in the *pakṣa* through the relation limiting the *sādhya*-ness has been taken as the establishment, and the qualification by all the absences of desire to infer has been taken as its qualifier. As a result, if there is desire to infer in spite of certainty about the *sādhya* there would remain *pakṣatā* as the absence of establishment qualified by the absence of desire to infer.

Just as the collocation of *pakṣatā* and *anumiti* as the cause and effect is conceived in relation to the self as their locus, so their collocation can also be conceived in relation to the *pakṣa* as their locus. If "the absence of establishment

qualified by the absence of desire to infer" be taken as the limiter of the substratum-hood of the import of the word "*pakṣa*", then "*pakṣatā*" as the absence of that establishment has to be located in the *p*, and for the sake of the collocation of *pakṣatā* and inferential result as the cause and effect the inferential awareness of the presence of the actual *sādhya* in the actual *pakṣa* has also to be located in the *pakṣa* (e.g., the mountain). In that case, the absence of the establishment of a particular person, qualified by the absence of desire to infer in that person, in the relation of possessor-ness of the absence of subject-hood determined by the counterpositive of that absence would be the cause of the effect, viz. the inference of the actual *sādhya* in the actual *pakṣa* by that person, in the relation of primary qualificand-ness. Thus the collocation of cause and effect will be maintained.

The establishment or inference of the actual *sādhya* in the actual *pakṣa* may occur in two ways: (i) by making its object that which is limited by the limiter of the *pakṣatā*, or (ii) by making its object the collocation of the property that is the limiter of the *pakṣatā*. In (i) there is inference or establishment of the presence of the *sādhya* in the *pakṣa* through the relation limiting the *sādhya*-ness, while in (ii) there is inference or establishment of the presence of the *sādhya* in only one part of the *pakṣa*. An instance of the first kind is "the pot is a substance", while an instance of the second kind is "the mountain has fire". In the first case the *sādhya*--substance-hood--is related to the *pakṣa*--pot--by the relation of inherence, which is limited by pot-ness, the limiter of the *pakṣatā*. In the second case the *sādhya*, fire, is related to one part of the *pakṣa*, mountain, through the relation of contact limited by the property pure-contact-ness (*śuddhasaṃyogatva*).

The prevented-preventer relation is to be conceived in two different ways. In the first kind of inference the preventer would be the establishment of the *sādhya* in the *pakṣa*, the object of which is limited by the limiter of the *pakṣatā*. In the second kind of inference the preventer would be any establishment, i.e., an establishment, the object of which is limited by both the limiter of the *pakṣatā* and an establishment the object of which is the collocation of the property that is the limiter of the *pakṣatā*. In this connection, it is also to be mentioned that *anumiti* and *siddhi* as the prevented and the preventer must be identical in form.

It may be contended that if *pakṣatā* is defined as the

absence of establishment qualified by the absence of desire to infer, then, in an instance where after the desire to infer has been produced the awareness of the *hetu*, the memory of pervasion, and consideration are successively produced, desire to infer ceases to be before consideration comes into being, and so when there is consideration there is no desire to infer and hence no inferential result is possible. This contention is met by saying that in such cases a new desire comes into being after consideration and causes an inferential result to occur. It is also held by some that just as desire to infer is the exciter in the preventer-hood of establishment, so the fitness of the desire to infer is also the exciter. The span of time during which inference is produced after the ceasing of the desire to infer is also an exciter. Thus the word "desire to infer" means both a desire and the time indicated by it. Hence even after the destruction of the desire to infer, the time indicated by it remaining existent, there is *pakṣatā* as the absence of establishment qualified by the absence of fitness for desire to infer, and as such, even after the destruction of the desire to infer, there can be inference with consideration as establishment.

In this connection it may be noted that just as desire to infer is the exciter in relation to the preventer-hood of the establishment, so the awareness of the invalidity of establishment is also the exciter in relation to the preventer-hood of establishment. Hence, like the absence of establishment qualified by the absence of desire to infer as *pakṣatā*, the absence of establishment qualified by the absence of the awareness of invalidity is also to be regarded as a separate cause of inferential awareness.

Finally, it is pointed out that just as the absence of establishment qualified by the absence of desire to infer as *pakṣatā* is the cause of inference, so the totality of the causes of perception of an object being the preventer of inference of that same object, the absence of the totality of the causes of the perception of an object, qualified by the absence of desire to infer, is to be regarded as a separate cause of inference to the same object.

51.160.17. *Parāmarśa*

51.160.18. *Kevalānvayin*

51.160.19. *Kevalavyatirekin*

51.160.20. *Arthāpatti*

51.160.21. *Avayava*

51.160.22. *Sāmānyanirukti*

51.160.23. *Hetvābhāsa*

51.160.24. *Īśvarānumāna*

51.161. JAGADĪŚA BHAṬṬĀCĀRYA, *Śabdaśaktiprakāśikā*

In addition to Bimal Matilal's summary provided here, for a more extended discussion of the substance of this work the interested student should consult K. N. Chatterjee, *Word and Its Meaning: A New Perspective (in the Light of Jagadīśa's Śabda-śakti-prakāśikā)*, Chaukhamba Oriental Research Studies No. 18 (Varanasi 1980).

Summary by Bimal Krishna Matilal

This book is very popular among the traditional, orthodox scholars of India. The content of the book is of great interest to both the Naiyāyikas (the logicians) and the Vaiyākaraṇas (the Grammarians). In traditional seminaries (*tols* or *pāṭhaśālas*) of North India, this book is often included in the syllabi of the degree in Nyāya and the degree in Vyākaraṇa.

In an Indian background, the close relationship between grammar and logic (Vyākaraṇa and Nyāya) needs hardly to be emphasized. Thus, a considerable portion of what is known as Navyanyāya in India is concerned with what we may call the problems of "logical grammar". The task of logical grammar is to classify the significant parts of sentences and to discover rules which determine the notion of "meaningful sentence". The *Śabdaśaktiprakāśikā* is a book dealing with logical grammar in this sense. There may be some obvious limitations in our using logical grammar as a method in philosophy. There is the further limitation of this book that it is concerned only with the peculiarities of the Sanskrit language. But, for Sanskritists, this book offers an alternative approach to Sanskrit grammar and semantics. Besides, it contains much material which deals with

what may be called the "universals" of language.

"E" references are to the edition by Dundhiraj Sastri in Kashi Sanskrit Series 109, Benares 1934.

CHAPTER ONE

(E4-188) 1-30. Jagadīśa begins this book by setting out a strong defense of the Nyāya theory that our knowledge of the meaning of uttered sentences (*śābdabodha*) is derived from a separate instrument of knowledge (*pramāṇa*). It is derived from our knowledge of the syntactically connected words (*sākāṅksaśabda*, verse 3). Usually perception and inference are regarded as the two main instruments (e.g., in the Vaiśeṣika and in Dignāga's school of Buddhism). Knowledge based upon authority can be reduced to some form of disguised inference. But the Navyanyāya school contends that when we listen to the utterance of a sentence and immediately understand what is meant we are not making any inference, nor are we perceiving what is expressed by the sentence. Our knowledge about the meaning of a sentence is construction-filled in the sense that one entity appears here as qualified by another. The meanings of individual words or word-components are distinct and hence stand in an isolated glory. But in a sentence's meaning they are so modified as to appear as connected and organized in a definite structure. Thus, Nyāya may be justified in being reluctant to accept the knowledge of this connected sentence-meaning as arising on the basis of the cognition of some inferential mark (*liṅga*).

"*Śābdabodha*" is thus translated here as "knowledge of the sentence-meaning". *Śābdabodha* is sometimes called "*anvayabodha*". This notion of *śābdabodha* is, in fact, an explication of the older term *śabdajñāna*, which is sometimes translated as "knowledge from language" or verbal knowledge. Navyanyāya considers *śabdajñāna* to be construction-filled awareness derived from a sentence-utterance. Thus "knowledge of the sentence-meaning" seems to be an acceptable rendering of *śābdabodha* in this context.

Since our knowledge of the sentence-meaning is derived from what Nyāya calls meaningful words or significant word-components, Jagadīśa tries to define the concept of "significant word" (*sārthakaśabda*). A word is to be considered significant if it can generate the cognition of its meaning only in collaboration with another syntactically related word (verse 6). Jagadīśa's problem here is to distinguish the concept of significant word from that of significant sentence. A significant sentence is, according to Nyāya, a cluster of syntactically connected words that have a combined meaning. Thus, even an expression like "*ghaṭam*" is considered to be a sentence (*vākya*) because it may generate cognition of its meaning without the help of another word or word-component. But the stem "*ghaṭa*- (*pot)"[1] is a word because it cannot generate cognition of its meaning without being in collaboration with some inflection like "-*am*" (the accusative). Although the meaning of a sentence like "*ghaṭam*" is not linguistically complete, it can be understood, from the Nyāya point of view. Logically, a construction-filled cognition needs only a qualifier to qualify a qualificand. The said sentence, even when it is unaided by other words, may generate a cognition of the form "*karmatvam ghaṭīyam*" (the accusative function belongs to the pot). In other words, the generated cognition will construe the pot (meaning of the stem) as the qualifier of the accusative relation (meaning of the inflection). And thus we will have an "atomic" but logically complete construction-filled cognition. Jagadīśa further contends that even a non-designative compound-word like "*śaśaviṣaṇa*" (rabbit-horn) is a significant word inasmuch as it can generate a false cognition of horns being related to some rabbit. Since only with the help of some inflection will such a compound be usable in language we cannot, however, call this compound-base a sentence.

Jagadīśa classifies the significant word-components into three types: the inflectible word-base[2] or the lexical items (*prakṛti*), inflections (*pratyaya*), and particles (*nipāta*). The inflectible word-bases like ("*ghaṭa* (*pot)" and "*cal* (*move)" enjoy some sort of primacy over the inflections like "*as*" (the nominative) and ""*ti*" (the present singular indicative) in the sense that in order to merge the "meaning" of a word-base (viz. the object pot or the action moving) into the sentence-meaning we need to have the certainty (*niścaya*) that the actual word-base itself ("*ghaṭa*" or "*cal*-") being associated with some

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[1]Since the English equivalent of a Sanskrit word-base will be indistinguishable from that of a Sanskrit-inflected word, the English equivalents of Sanskrit word-bases are marked with asterisks.

[2]To note one terminological quirk: a word-base is, in fact, a kind of word or *sāthakaśabda*.

inflection. A word-base contributes its meaning to the sentence meaning in an independent way while an inflection contributes its meaning in a dependent way. A particle like "*ca* (and)" or "*vā* (or)" also enjoys some independence.

Word-bases are of two types: nominal base or stem (*nāman*) and verbal base or root (*dhātu*). It is contended that a nominal base like "*ghaṭa*" (pot) or a verbal base like "*cal*" (move) can have an identity of reference with another word-base like "*nīla*" (blue) or "*mṛdu*" (slow) respectively. But a particle lacks this privilege. It is said that a particle cannot relate its meaning by identity-relation to the meaning of any other word-component in the sentence.

A nominal base is also called "*prātipadika*". Jagadīśa resorts to some complicated devices in order to make clear the difference between the concept of nominal base and that of verbal base. A nominal base needs the assistance of the nominative terminal inflection in order to generate a cognitive meaning with its own meaning as the chief qualificand (*mukhyaviśeṣa*). A verbal base needs the assistance of an "agent" inflection "*tṛc*" (resembling the English "-er") in order to generate a cognitive meaning with its own meaning as the qualifier (also verse 56).

Nominal bases are divided into four groups from the point of view of their semantic function. One is called "*rūḍha*", viz. the class of words that express only the conventional meaning in a sentence. Word-bases like "*gau*" (cow), in the sentence *gaur asti* ("there is a cow"), fall under this class. The second group is called "*lakṣaṇā*". Words of this class convey metaphorical or secondary meaning in a sentence. Nominal bases like "*gaṅgā*" (Ganges) in the sentence "*gaṅgāyāṃ ghoṣaḥ*" (a village on the Ganges) fall in this class because "*gaṅgā*" conventionally means a particular river while in this sentence the same word has to be interpreted as meaning the riverside. The third group is called "*yogarūḍha*". A word of this class agrees with the derivative sense, i.e., with the combined meaning of the sub-components, but at the same time expresses, through convention, only a special object which may agree with the derivative sense. A word like "*praṅkaja*" (born in mud) should have expressed anything that is born in mud, but conventionally its meaning is so fixed that it expresses only the lotus, which happens to be born in mud. The reason for narrowing down the scope of reference in this way may be found in the forgotten history of language development. The

fourth group is called "*yaugika*". Words of this class retain their derivative sense, i.e., agree fully with the combined meaning of their sub-components. Thus "*pāṭhaka*" (reader) means anybody who reads. It may be noted that the composite word-base "*pāṭhaka*" is not to be regarded as a sentence, but when an inflection, viz. a case-termination, is added it becomes a sentence in the Nyāya sense of the term.

A word of the first group, i.e. a conventionally meaningful nominal base, is also called a *saṃjñā*. These nominal bases have denotative power (*śakti*) in the primary sense. They can refer to individuals through some attributes or universals. Grammarians like Patañjali classified these words into four types. There are some that signify class-characters or generic properties (*jāti*) as attributes. The word "*gau-*" (cow) is *gotvavācaka*, i.e., it "expresses" (signifies) cow-ness. There are other words which signify *dravya*, i.e., (a) material substance. For example, the word "*āḍhya*" (wealthy) signifies wealth or money, which is a substance. The third class of words signifies qualities, e.g., "*nīla*" (blue) which signifies blue color. The fourth class of words signifies action (*kriyā*), e.g., "*cala*" (moving) which signifies motion. To put it in another way, we may say that "*gau*" (cow) describes an individual which has cow-ness (a *jāti*) while "*āḍhya*" (wealthy) describes an individual who possesses wealth or money (a substance) and "*nīla*" (blue) describes an individual which has blue color (a quality) and "*cala*" (moving) describes an individual which possesses movement. Jagadīśa points out that this fourfold classification was also endorsed by Daṇḍin, the Ālaṅkārika.

This fourfold classification of the grammarians is rejected by Jagadīśa because, he says, it fails to make room for such words as "*mūka*" (mute), which signifies neither a generic character nor a quality nor an action nor a substance. This word describes an individual characterized by absence of speech. Thus, we may say that it signifies an absence as the distinguishing attribute. It may be noted here that the Nyāya school regards the absence of anything as a (negative) attribute much in the same sense as the so-called positive attributes such as cow-ness and blue color are attributes.

Jagadīśa instead favors a threefold classification from the point of view of a different principle of division: 1. *naimittikī saṃjñā*, i.e., words or nominal bases which describe objects by attributing to them some generic character or other; 2. *pāribhāṣikī saṃjñā*, i.e., words which describe objects by

attributing some singular property to them; 3. *aupādhikī saṃjñā*, i.e., words which describe objects by attributing some imposed condition or property (*upādhi*) to them. Since Nyāya believes that some universals like cow-ness constitute real generic properties apart from the individuals where they are instantiated, words like "*gau*" (cow) are said to attribute cow-ness, etc. to the individuals they describe. A singular name like "*gagana*" (the sky) belongs to the second group because it attributes a singular property to the individual. Other common names like "*dūta*" (messenger) belong to the third group because individuals denoted by them are grouped together by some imposed condition as the property of carrying messages. Incidentally, this shows that Navya-nyāya does not regard all class-characters as real universals.

Under *yaugika* words Jagadīśa discusses elaborately various types of compounds (*samāsa*) and derivative words (*kādanta* and *taddhitānta*). He also observes that there is another way of dividing the nominal bases. From the point of view of grammatical gender, we may divide them into three: the masculine, the feminine and the neuter. Here he refers to the interesting grammatical theory that gender-suffixes form an integral part of the nominal bases.

CHAPTER TWO

(E189-273) 31-51. Jagadīśa then discusses the composition of different compounds in Sanskrit. The discussion of the semantic structure of the compounds runs in this order: *karmadhāraya, dvigu, tatpuruṣa, avyayībhāva, bahuvrīhi, dvandva, upapadasamāsa*

CHAPTER THREE

(274-293) 52-66. Turning to verbal bases, Jagadīśa classifies them into three: 1. *ganokta* or atomic roots, i.e., those that are enumerated in the list of roots given by the grammarians (called *Dhatūpāṭha*; see O. Böhtlingk, *Pāṇini's Grammatik* (Leipzig: H. Haessel 1886; reprinted Delhi: Motilal Banarsidass 1998, 2001), pp. 61-84); 2. *yaugika* derivative roots, i.e., those that are formed from atomic roots and inflections; 3. the "*sautra*" roots or those that are either mentioned in the grammatical rules of Pāṇini or current in language as roots but not listed (verse 58). This third group evidently accounts for those roots which are new roots (like "*hindol-*" and "*āndola-*") added to the lexicon as the language

grows. Incidentally, Jagadīśa seems to be indifferent to the fact that even a verbal base can have a contextual, i.e., metaphorical or secondary meaning, depending on the context or linguistic environment, which is not the same as its primary meaning. Probably he accepts the maxim that any root can have a multitude of meanings (cf. *anekārtha hi dhātavaḥ*), one or the other of which becomes relevant to the context. Or, perhaps, he thinks that it is more suitable to talk about the contextual meaning of the nominal bases formed from roots rather than talking about the contextual meaning of roots themselves.

Inflections (*pratyaya*) are of four types: *vibhakti* (terminal inflection or ending), *dhatvaṃśa* (inflection that forms derivative roots from atomic roots, such as "*-san-*" or the desiderative suffix), *taddhita* (inflections forming new nominal bases from atomic nominal bases), and *kṛt* (inflections forming word-bases from atomic roots). The meanings of inflections are, in general, related to the meanings of the word-bases, to which they are added, by the subject-predicate (*uddeśyavidheya*) relation. In other words, the meaning of a word-base (such as a pot) qualifies the meaning of the terminal inflection (such as the accusative relation). A *vibhakti* or terminal inflection can be either a *sup* (that whcih is added to a nominal base) or a *tiṅ* (that which is added to a verbal base). In this connection, Jagadīśa defines and describes in detail different case-relations as well as the semantic significance of each tense-suffix and mood-suffix.

CHAPTER FOUR

(E274-390) 67-94. Here Jagadīśa deals with the definition of the six *kāraka* categories.

CHAPTER FIVE

(E390-450) 95-109. The author is concerned with the meaning of the verbs and the verbal suffixes. The definitions of all the ten *la-kāras* are given along with the definition of *dhātvaṃśa*.

CHAPTER SIX

(E451-469) 110-156. The author deals briefly with *taddhita* suffixes, and studies them under three headings.

CONCLUSION

Jagadīśa deals with almost all the important grammatical

categories and their semantic functions. We also find discussions of some important problems of philosophical semantics in many places of this book. Thus, in a particular section, Jagadīśa deals with the well-known problem of universals as meanings of names. He expounds the views of Kumārila, Maṇḍanamiśra and Prābhākara Mīmāṃsā in this connection and criticizes each of them.

At some points Jagadīśa suggests some improvement of the Nyāya theories. For example, he is critical of Gaṅgeśa's definition of *lakṣaṇā* (metaphorical meaning-function) and gives his own improved version of it. As a Naiyāyika, he frequently criticizes the Prābhākara views. He refers to Patañjali, the author of the *Mahābhāṣya*, as an authority in some places, although he rejects Patañjali's fourfold classification of the conventionally meaningful nominal bases. He often quotes from Bhartṛhari. But there is one particular verse, which he quotes and ascribes to Bhartṛhari, which is, in fact, of doubtful authenticity. It may be that Jagadīśa did not have direct acquaintance with the complete work of Bhartṛhari.

The merit of this book can hardly be overestimated. Jagadīśa's classification is very systematic and sometimes quite helpful for the description of the Sanskrit language. He carefully avoids cross division or wrong classification. He tries to define scrupulously each concept so that each subclass will be distinct and well-defined. Since he tries to define logically the basic categories which we generally grasp through intuitive notions, his definitions tend to be highly complicated. But this does not detract from the merit of this book.

51.162. JAGADĪŚA BHAṬṬĀCĀRYA, *Tarkāmṛta*

"E" references are to the edition by Jiban Krishan Tarkatirtha, Bibliotheca Indica 302 302, 1974. Anantalal Thakur has also given a summary of the work in ODVS pp. 346-349. There is also a translation of the work by Baliram Shukla, published from Poona in 1997

Summary by V. Varadachari

1 (E2) The author takes up the Upaniṣadic passage "the self is to be known, thought upon and meditated on" (*Bṛhadāraṇyaka Upaniṣad* 2.4.5). Jagadīśa studies this passage in reference to Nyāya metaphysics. Thinking (*manana*) consists in reflecting on the difference in nature of the self from other things. The other two involve study of the Vaiśeṣika categories.

2 (E3) Substance-ness, quality-ness and action-ness are proper universals (*jāti*), while universal-property-ness and individuator-ness are imposed properties (*upādhi*). Likewise, *ākāśa*-ness, time-ness and spatial-direction-ness are imposed properties, while the remaining substances have proper universals.

3 (E5-6) Earth has fourteen qualities (color, smell, touch, taste, number, size, separateness, contact, disjunction, farness, nearness, weight, liquidity, trace). God's qualities are awareness, desire, volition, number, size, separateness, contact and disjunction.

4 (E6-8) The classification of substances is novel. Earth, water, fire and air are of two kinds, namely atoms and parts. Atoms are eternal, parts are non-eternal. There are three kinds of parts: body, senses and object. Or, some substances (atoms, dyads) are imperceptible, others are perceptible.

5 (E9) The non-inherence cause for a substance is a quality, while the non-inherence cause for a quality it may be another quality or a motion. The general (instrumental) causes of all effects are God, God's knowledge, His desire, His volition, prior absence, time, spatial direction and *adṛṣṭa*.

6 (E33) The specific qualities of earth are produced by "cooking". They are of two varieties, those which are dependent on cooking and those which are produced by cooking. Qualities produced in turn by the qualities of a thing's cause(s) are of the former sort, while those produced by contact with fire are of the latter sort.

7 (E46) Jagadīśa distinguishes dreams and indefinite knowledge as distinct varieties of *ayathārthajñāna* (following Praśastapāda), and in opposition to the Nyāya school, which brings these under error).

8 (E78) Three kinds of obstruction are mentioned: (1) pervading the pure *sādhya* while not pervading *hetu*; (2) pervading the *sādhya* as limited by a property of the *pakṣa* while not pervading the *hetu*; (3) pervading the *sādhya* as limited by the *hetu* while not pervading the *hetu*.

9 (E84) Awareness of speaker's intention is mentioned as one of the four causes giving rise to verbal knowledge.

10 (E87) *Lakṣaṇa* is of two kinds: *śakti* and *lakṣaṇā*.

51.163. JAGADĪŚA BHAṬṬĀCĀRYA, Commentary on a *Tarkadīpikā*
Cf. NCat VII, 126.

51.164. JAGADĪŚA BHAṬṬĀCĀRYA, *Nyāyadarśa* or *Dravyadarśa* or *Nyāyasārāvalī*
Cf. NCat VII, 126

51.165. JAGADĪŚA BHAṬṬĀCĀRYA, *Dīpikā* on Annambhaṭṭa's *Tarkasaṃgrahadīpikā*
Cf. NCat VII, 124; Bodas, 375

52. AGNIHOTRA BHAṬṬA (1630)

Consult DM p. 53, etc. Besides his works on Nyayā, Agnihotra Bhatta is also the author of an Advaita work, a commentary on Nṛsiṃhācārya's *Advaitaratnakośa* whose title is sometimes given as *Pūranīvyakhyā* or *Tattvavivecanī* manuscripts listed at NCat I, 47 and VIII, 64).

52.166 AGNIHOTRA BHAṬṬĀ, *Tarkojjīvinī* on Annambhaṭṭā's *Tarkabhasaṭattvabodhini*
See NCC 1, 47; 8, 118 for manuscript citations

52.167 AGNIHOTRA BHAṬṬA, *Sphūttī* on Pakṣadhara's *Tattvacxintāmanyāloka*
Cf. NCC 1, 47; 8, 40.

53. RĀMĀNUJA DĪKṢITA (1630)

Nothing seems to be known about this author.

53.168 *Darpana* on Gaṅgeśa's *Tattvacintāmaṇi*
Consult NCat VIII, pp. 25 and 39.

54. HARIRĀMA TARKAVĀGĪŚA (1635)

Harirāma was the teacher of Gadādhara Bhaṭṭācārya and must have been alive around 1630. He is hailed as the leading pandit of Navadvīpa. Among his pupils were Gadādhara and Raghudeva. A famous scholar of his time, he wrote a great many short works, probably more than are listed below.

54.169 HARIRĀMA TARKĀVĀGĪŚA, *Ācāryamatarahasya*

Summary by V. Varadachari

A work of this title has been edited by Rupanatha Jha in *Nyāyanibandhāvalī*, Mithila Institute Series, Ancient Texts (Darbhanga) 22, 1970, pp. 1-28. Harirāma is reported to have been the author of such a work, although the manuscript on which the following summary is based does not have any mark establishing the identity of its author.

Udayana, the *ācārya* referred to in the title, held that consideration is the causal condition *par excellence* of the rise of inferential awareness (*anumiti*). This consideration has the form "the mountain which has fire-pervaded smoke", and the resultant inferential awareness is "the mountain which has fire-pervaded smoke has fire". Gaṅgeśa, on the other hand, held that awareness of pervasion is the causal condition *par excellence* through the operation (*vyāpāra*) in the form of consideration. This essay argues in favor of Udayana's theory on the basis of logical economy (*lāghava*).

54.170 HARIRĀMA TARKAVĀGĪŚA, *Anumitermānasatvavicārarahasya*

A work, given this title, has been edited by Gaurinath Sastri, Calcutta 1959. The title given to it by Gaurinath is the same as the title of #s 1082 and 892 (pp. 2, 5) of CSCR 20 (corresponding to two manuscripts found in the Calcutta Sanskrit College Library). However, it is given a distinct title from the one given to the work presently under discussion. Our title here is assigned by CSCR 20 to another work by Harirāma, which the compilers of CSCR provide with a much more appropriate description matching the title, as follows: "The manuscript contains a dissertation on the fact that *anumiti*, fruit of inference, i.e., inferential knowledge is quite different from mental perception and so the instrument of inference (*anumāna*) and not mental perception (*mānasa pratyakṣa*) is to be admitted as the cause leading thereto". Gaurinath Sastri in fact does not identify the manuscript from which he is working in providing us with his edition, but it is clearly CSCR 20's #1083, and neither #1082 or #892, that he is editing. For that matter, #1082 and #892 differ between themselves in the portions provided in CSCR 20.

54.171 HARIRĀMA TARKAVĀGĪŚA, *Anumitiparāmarśayorvādārthamañjūṣā*

This appears to be the work which is actually edited by Gaurinath Sastri, Calcutta 1959. See the previous entry for the confusion about works and manuscripts.

What follows below is taken from the Introduction by Gaurinath Sastri, pp. xiii-xvii, with appropriate emendations to reflect the terminology of this Encyclopedia.

Summary by Gaurinath Sastri

In the present work, which comes from the pen of Harirāma Tarkavāgīśa, an illustrious exponent of Neo-logic, we find how the astute logician unlike all others belonging to his own school of thought seeks to establish the claims of inference to be recognized as an independent instrument of knowledge. He starts the discourse by referring to a view which, of course, it is difficult for us to identify at this distant date, and which would seek to explain away inference as a case of extraordinary perception.

According to that view, as Harirāma records it, the consideration following upon the cognition of pervasion would give rise to a perceptual knowledge of the *sādhya* and not its inference. In a case of doubt it is observed that the perceptual knowledge of the property of the pervaded (*vyāpyadharma*) of any one of the two extremes gives rise to the perception of that extreme. Thus in the instance, "Is it a tree or a human being", if one perceives the branches, the twigs and the like, which are determined by tree-ness, one should have the perception of the tree. If, however, one perceives the different limbs of the human organism which are determined by the universal human-ness one would perceive a human being. Likewise, if one witnesses smoke coming out of the hill one should have the perceptual knowledge of fire as the latter is determined by smoke. It comes to this, therefore, that the knowledge of fire is not a case of inference but one of perception.

It may however be objected that the perception of an object is conditioned by sense-object contact and as the same sense-object contact is not available; thus, in the case under consideration, it would not stand to reason to claim that the afore-mentioned example is a case of perceptual knowledge. To this the obvious reply would be: Yes, surely there is no sense-object contact in the above instance and as such it is not an

instance of ordinary perception. But when the Naiyāyika believes in the authority of perception springing from extraordinary contact there cannot be any valid ground for denying it as a case of perception of that type. The knowledge of fire at the sight of smoke may be explained as due to the memory of fire resulting from the perception of fire as associated with smoke on previous occasions. So when a volume of smoke is seen issuing forth from a hill-top, fire is presented to the senses through that memory. And with such a memory functioning as the contact, the so-called inferential awareness may be looked upon as a case of extraordinary perception.

We have seen above how a school of thinkers has sought to reduce inference to extraordinary perception. But it should be pointed out that there are cases of inference which cannot be explained away by extraordinary perception. Thus extra-ordinary contact may be available only in cases of only-positive and positive-negative inference. But in the case of only-negative inference such extraordinary contact is not available and as such the question of extraordinary perception cannot arise. To take an example, "The earth is different from others, because it is determined by earth-ness". This is a typical case of only-negative inference since it is exclusively based on negative concomitance. In this inference, earth is the subject of the inference, difference from what it is not, that is to say, from others (*itarabheda*) is the *sādhya* while earth-ness is the *hetu*. Now this inference results from a negative synthetic judgement which would be: Earth is determined by earth-ness which is the counterpositive of an absence pervading otherness (i.e., *itaratva*). Unlike affirmative synthetic judgment, there is no possibility of knowing the *sādhya* difference from others (*itara-bheda*) in this negative synthetic judgment. As such the question of extraordinary contact through memory is not possible. To this the rejoinder will be that though extraordinary contact through *jñānalakṣaṇasannikarṣa* cannot yield the perception of the *sādhya* still extraordinary contact through universals (*sāmānya-lakṣaṇasannikarṣa*) will enable us to obtain perceptual awareness of it.

Let us explain the point in detail. What has been stated before is that the *sādhya*, viz. *itarabheda*, being not amenable to previous cognition cannot be presented to senses through memory, but this *itarabheda* which is after all a species of *bheda* may indeed be presented to the senses on the strength of the

generic attribute determining it.

To this objection of course Harirāma replies that the perception following in the wake of consideration is of the type "I infer" and not "I perceive". After the emergence of consideration the content of which is of the form "the hill is possessed of smoke as determined by fire", the resultant awareness (viz. awareness of fire-on-the-hill) must be accepted as inferential in character inasmuch as the after-cognition of that resultant takes the form "I infer" (*aham anuminomi*). Thus the nature of the resultant awareness is determined by after-cognition. Hence the inherent difference between the two instruments of knowledge, perception and inference, is attested by the after-cognition following upon each of them.

The opponent may, however, contend that the after-cognition as referred to above does not prove that inference is a distinct type of knowledge, but what it establishes is only a particular content-ness in the awareness, viz., that fire-on-the-hill is of the form of a predicable and nothing more. But Harirāma points out that in order to determine the aforesaid content-ness which is in the form of a predicable there is no other way but to accept the knowledge of pervasion, etc. as the conditions for the same. And this, Harirāma thinks, will ultimately lead us to an admission of the knowledge of pervasion as the source of a type of knowledge. In this context it may be noted that Harirāma has opined that there is an identical content-ness (*vidheyatā*) which is common to the different kinds of awareness, viz. extraordinary perception (which in the opinion of the opponent replaces inference), inference and verbal testimony. And in this context he answers an objection, viz., if content-ness be one identical principle it fails to explain the difference in the three types of knowledge, by saying that notwithstanding the identity of contents the difference in the awarenesses could be traced to the difference in their respective conditions. For example, it is the knowledge of pervasion that determines the characters of inference as differing from other types of awareness. It is not required of any special form of content-ness to account for the inferential awareness as such...

Let us now turn our attention to another contention of the opponent. He observes that even if inference is admitted for the sake of argument, yet it may be subsumed under perception as one of its varieties in the same way as ocular perception or tactual perception is regarded as different species of perceptual

knowledge. And hence the source of that kind of perceptual awareness would be nothing but a kind of instrument of perception. But Harirāma observes that such a position is opposed to the testimony of experience; for if inference were only a type of perception then in all cases of inference one should have the experience that the same is perceptual in character which to all intents and purposes is not attested by the verdict of experience.

The opponent may further contend that if it be assumed for the sake of argument that being an inferential conclusion (*anumititva)* as a universal is established through introspection, yet the same *anumititva* may well be regarded as an instance of extraordinary perception through memory. To this Harirāma replies by saying that the opponent seems to be of the opinion that all cases of inference are cases of extraordinary perception. Now it is admitted on all hands that where the conditions of inference of any particular object are present the conditions of perceptual awareness can only exist provided the content of the perception is identical in form with the content of the inference. In case the content of the inference and the content of the perception are of different forms and not strictly identical in character the conditions of inference prevail over the conditions of perception with the result that we have a case of inferential awareness and not a perceptual one. As this rule is admitted by the opponent also he can no longer say that every case of inferential awareness can be shown to be a case of extraordinary perception or, for that matter of perception at all. If the conditions of inference under all circumstances would have co-existed with the conditions of perceptual awareness then and then only the position of the opponent would have some justification."

54.172. HARIRĀMA TARKAVĀGĪŚA, *Anumitiparāmarśabādhabuddhi*

Cf. NCat I, 211 for manuscript citation.

54.173. HARIRĀMA TARKAVĀGĪŚA *Avacchedakāvacchedana anumitivicāra*

Cf. NCat I, 412 for manuscript citations.

54.174. HARIRĀMA TARKAVĀGĪŚA, *Bādharahasya*

This work is identified as #1092 in the Calcutta Sanskrit College collection; cf. CSCR 20, #17 (pp. 17-20), where the

introductory and concluding sentences are provided.

54.175. HARIRĀMA TARKAVĀGĪŚA, *Bādhaviṣayatārahasya*

Nothing appears to be known about this work.

54.176. HARIRĀMA TARKAVĀGĪŚA, *Citrarūpavāda* or *-vicāra*

Cf. NCat VI, 43 for manuscript citations. Also cf. CSCR 20, p. 94-95, which remarks "The work establishes *citrarūpa* or composite color. It also enquires into the cause of *citrarūpa* and also the cause of perception of *citrarūpa*."

54.177. HARIRĀMA TARKAVĀGĪŚA, *Dharmitāvacchedakarahasya*

A manuscript of this work is held at the Calcutta Sanskrit College Library. Cf. CSCR 36, pp. 197 ff.

54.178. HARIRĀMA TARKAVĀGĪŚA, *Dhvaṃsajanyābhāvayoḥ kāryakāraṇabhāvarahasya*

The work is edited with Jaiminikanta Tarkatirtha's commentary by N. Siddhantavagisa, Calcutta 1950.

Summary by Jitendranatha Mohanty

The author undertakes an examination of the inference

(A) "Destruction, since it is an effect, is itself destructible",

and tries to show that the *hetu* is vitiated by the obstruction positivity (*bhāvatva*). In (A) the *pakṣa* is destruction, the *sādhya* is destructibility-possessing, and the *hetu* is the property of being an effect. The supporting pervasion would be (1) whatever possesses the property of being an effect is also destructible.

This pervasion is vitiated by the obstruction *positivity* inasmuch as not all that is an effect is destructible, but only such as are both effects and positive. In other words, only that which possesses *janyabhāvatva* is destructible. The *pakṣa*, destruction, lacks this property: it is an effect but is not a positive entity. It does not follow therefore that it is destructible.

(2) The two properties being an effect and destructibility-possessing are present only in positive entities (*bhāva*). The pervasion stated in (2) is then sought to be supported by establishing a causal connection which may be

stated thus:

(3) The destruction of a thing is caused by its being a positive effect. The relation determining the effect here is counterpositive-ness, and that determining the cause is identity The causal relation stated in (3) is substantiated by the following argument: The destruction of a jar is followed by the destruction of the color, etc. which inhere in the jar. The destruction of the jar then may be *qua* destruction of the jar regarded as causing destruction of all that inheres in the jar. From this it would follow that even jar-ness (*ghaṭatva*) would be destroyed with the destruction of its locus, which, however, is contrary to the admitted eternality of universals. Such a consequence may be averted by assuming that (4) only positive effects are destructible.

Harirāma next proceeds to deal with a host of possible objections against (4), and argues that the unwanted consequence of the destruction of jar-ness cannot be averted except by assuming the causal connection stated in (3).

(5) If the term "positive" as inserted in (3) were not needed for destructibility there would arise destruction of destruction. This consequence may be sought to be averted by appealing to the rule (6) that in every case of destruction, say of a jar, the specific cause is determined by the corresponding specific character, say jar-ness, whereas in the case of destruction there is no specific character. The merely generic cause of *janyatva* (being generically produced) is not enough, for a generic cause is ineffective in the absence of specific causes. There being no specific character to determine its cause, the supported destruction of destruction should not follow.

But the rule (6) may be challenged by pointing out that (7) momentary sounds are destroyed simply due to the generic cause, i.e., that destruction of *adṛṣṭa* would suffice to bring about the destruction of destruction. Destruction of destruction being thus otherwise unavoidable, it is necessary to formulate the causal connection in accordance with (3).

Harirāma makes a final attempt (8) to justify the insufficiency of merely being produced as the determinant of the cause of destruction. Being produced is not one property, but differs from case to case according to differences in that which is produced. As a consequence the determinant of the cause of destruction would differ from case to case. Being a positive thing that is produced (*janyabhāvatva*), on the other hand, is one single property. Hence the justification--on the

ground of economy--of making being a positive thing that is produced, rather than mere being produced, the determinant of the cause of destruction.

Granted that positivity is indispensable, is the property of being an effect indispensable? Is it not enough to say that only positive entities are destructible? The reply is: (9) that would render even such positive entities as *ākāśa* destructible. It is necessary therefore to say that destructibility belongs not to all positive entities, but only to such positive entities as are also effects.

Harirāma quotes Raghunātha Śiromaṇi in support of his contention (10) that assumption of the destruction involves complexity. It is more economical to assume the indestructibility of destruction than assuming endless series of destructions.

(11) Harirāma does not accept the usual contention that destruction of a destruction would lead to the re-emergence of the counterpositive of the original destruction. Even at the time of the destruction of the destruction of a jar, there should persist the awareness that the jar was destroyed, and in the face of this awarenesss the re-emergence of the jar is not possible. The ground on which he himself would reject the possibility of a destruction of a destruction is rather that stated in (10).

54.179. HARIRĀMA TARKAVĀGĪŚA, *Dravyamatarahasya*

A manuscript of this work is held by the Calcutta Sanskrit College Library.

54.180. HARIRĀMA TARKAVĀGĪŚA, *Evakāravādārtha*

The work was edited from Dharwar in 1888. It is the same as #1390 of CSCR 20 (pp. 20-21).

54.181. HARIRĀMA TARKAVĀGĪŚA, *Guruparāmarśavāda*

Cf. NCat VI, 74 provides manuscript citations.

54.182. HARIRĀMA TARKAVĀGĪŚA, *Itarabādhavicārarahasya*

See CSCR 20, p. 21ff. for information and the introductory and concluding sections of this work.

54.183. HARIRĀMA TARKAVĀGĪŚA, *Jñānadvayakāraṇatārtha*

Cf. CSCR 36, pp. 186-187, which tells us that "the manuscript deals with the two kinds of knowledge leading to inference....According to the Naiyāyikas the cause of *anumāna* is *parāmarśa*, which is just one composite knowledge. According to the Mīmāṃsakas the cause is to be attributed to two conditions: (1) the knowledge of invariable relation of the *hetu* and the *sādhya*, and (2) knowledge of *hetu* existing in the *pakṣa*. This work discusses the merits and demerits of these two views."

54.184. HARIRĀMA TARKAVĀGĪŚA, *Jñānalakṣaṇavicārarahasya*

The work is edited by Gopikamohan Bhattacharya, Calcutta 1958.

Summary by Jitendranatha Mohanty

1. Starting with the familiar Nyāya classification of extraordinary perception, Harirāma gives a list of cases where perception is made possible by extraordinary connection through the mediation of a past knowledge, i.e., by *jñānalakṣaṇasannikarṣa*. These cases are:

i. Perception of the that-ness (*tattā*) in (or as a component of) the recognition "this is that person".

ii. Perception of the (counterpositive) pot in (or as a component of) the perception "the pot is absent".

iii. Visual perception of fragrance in (or as a component of) the judgment "the sandalwood is fragrant". (This includes, in general, perception of an object through a sense-organ which is normally incapable of perceiving it.)

iv. Perception of the pot in (or as a component of) the introspective awareness "I know the pot".

In none of these cases do ordinary modes of contact of sense-organs with their respective objects exist. We have to assume that the perceptual connection takes place through another (past) awareness.

2. The Prābhākaras resolve all such cases into two component but successive awarenesses, one of these components being a memory (of the that-ness, the absent pot, the fragrance or the object known), and the other being an ordinary perception (of the this, the absence, the sandalwood, or the knowledge of the pot). They do not recognize the rule that perception of a relational entity must involve perception of the relata: this rule, if admitted, would lead to the postulation

of an extraordinary perception of the relatum in each of the above cases. All that the Prābhākaras are willing to admit is that there should be an awareness, in such cases a memory, of the relata exactly preceding the perception of the relational entity.

Harirāma rejects the Prābhākara explanation on the familiar ground that mere non-distinction between two awarenesses cannot account for the appropriate practical behavior which ensues upon such a case. This is the usual point made against the Prābhākara theory of error.

3. Harirāma next considers the question: Is the awareness that serves as the medium of extraordinary contact in such cases only of the construction-filled (*savikalpaka*) type, or is construction-free (*nirvikalpaka*) awareness also able to play this role? He attributes to older Naiyāyikas the view that a construction-filled awareness alone can fulfill this function, the choice being based on the consideration that if a construction-free awareness could also do the same job then there would be introspective perception of construction-free awareness, which is contrary to the Nyāya position. Introspective perception of construction-free awareness is ruled out on the ground that the object of a perception must exist at the time of perception whereas a construction-free awareness perishes at the moment when the supposed introspective perception of it could possibly occur, i.e., in the third moment after its origination (the second moment being taken up by the construction-filled awareness which must invariably follow the construction-free one).

Two conditions are needed for the possibility of introspective perception of a primary awareness. In the first place, the mind should be connected to the awareness, which of course is always the case (the relation being of the *saṃyuktasamavāya* type). What is also required is that the content of a primary awareness be manifested in a subsequent awareness, which normally does not take place in the case of construction-free awarenesses, for a construction-free awareness is replaced by a construction-filled one whose content is different. If, however, a construction-free awareness could act as the medium of extraordinary contact, then its object would come to be re-presented, and the second of the above two conditions being fulfilled; nothing else could impede the possibility of an introspective perception of the construction-free awareness. This is the reason why the older Nyāya rejects the possibility of construction-free awareness playing the role of *jñānalakṣaṇa-sannikarṣa*.

Harirāma advances another reason why construction-free awareness is incapable of being introspected. Construction-free awareness is followed by construction-filled awareness, so that if any introspection of the former were to occur, it could occur only in the third moment after its occurrence, but in the third moment after its arising the construction-free awareness perishes. Since a perception is caused by its object only as its contemporary, no introspective perception of the construction-free awareness is possible.

After thus stating the older view that only construction-filled awareness can function as extraordinary contact, Harirāma proceeds to defend it against a host of objections.

Further, he refers with approval to Raghunātha Śiromaṇi's view that an object can be re-presented through *jñānalakṣaṇa* exactly in the same manner as--i.e., with the same determinants with which--it had been apprehended before. A cow, e.g., may have been known as a cow, or merely as an animal. Cow-ness may have been known either as cow-ness, or merely as a universal. On the nature of this original apprehension would depend how its content would be represented in a subsequent occasion. This rule is then, incidentally, used, following Gaṅgeśa, to corroborate the Nyāya theory of extrinsic truth (*parataḥprāmāṇya*), and the contention that the first inference establishing the truth of an awareness has to take the form of a negative (*vyatirekin*) inference.

4. Harirāma next takes up the question whether only awareness or also desire, effort, aversion and traces--all of which possess, along with awareness, the property of having a content--may serve as the medium of extraordinary connection. There is a view, held by some Naiyāyikas led by Raghunātha Śiromaṇi, that recognition does not require an explicit remembering of the that-ness (*tattā*) but is caused by mere traces of it. This certainly involves an economy in explanation. Those who hold this view would deny that awareness as awareness is essential for extraordinary connection. When therefore one says "I desire such and such an object", or "I am doing this", the object of desire or action is presented, according to this view, not through another awareness, but directly through the desire or action that is being introspectively apprehended. This view, which allows even mere traces to act as the medium of extraordinary presentation, runs into various difficulties, the chief of which is that on this account even

unexcited (*anudīta*) traces should suffice for the purpose of presenting their contents, which is obviously an absurdity.

Though various possible answers to this difficulty are considered, another alternative solution to the entire question is taken up. According to it, awareness, desire and action are grouped together and distinguished from traces and the other specific qualities of a self. It is urged that only these three--awareness, desire and action--may serve as a medium for extraordinary presentation. What is essential, then, for this purpose is not the property of being an awareness (*jñānatva*), nor the general property of being-an-object that is common to all four--awareness, desire, action and traces--but only the more specific type of having-a-content (*saviṣayakatva*) that belongs in common only to the first three of them. On this view, though satisfaction and frustration are not traces, etc., yet they do not, unlike awareness, desire and action, possess the property of having-an-object; they are therefore excluded, as they should be.

Three views are then compared and contrasted with regard to the economy they effect in their explanations. These three views are:

i. That extraordinary perception requires the medium of an awareness *qua* awareness;

ii. That extraordinary perception requires the medium of one or more of awareness, desire, action and traces, the generic property of having-an-object being common to all four;

iii. That extraordinary perception requires the medium of either awareness, desire or action, but not traces.

Harirāma favors view (iii), but adds (iv) that an altogether different case of extraordinary connection may be recognized where traces together with their exciting factors serve to present their object. Virtually, therefore, Harirāma favors (ii); only he splits it up into two totally different cases, with a different causal principle for each.

5. Harirāma next takes up the more modern view--attributed in Anantakumāra Bhaṭṭācārya's commentary *Vimarśiṇī* to Raghunātha Śiromaṇi--that even construction-free awareness functions as the medium of extraordinary connection (contrast paragraph three above). The objection, as already explained in paragraph three, that such a view would lead to the admission of an introspective perception of construction-free awareness, is answered by laying down the rule that

perception of an awareness requires that that awareness must be an apprehension of relatedness in its own content. The difficulty and its solution are alike in the old and new schools. Whether it is a construction-free or construction-filled awareness, the possibility of its introspective perception at the second moment after its origination is to be excluded on the ground that during this second moment one must be having a construction-free awareness (of knowledge and knowledgehood and their relation) which is necessary for the very possibility of an introspection of the form "I know....". However, Harirāma favors the newer view that all awareness *qua* awareness serves as extraordinary connection on the ground that it effects an economy in laying down the limiter of the causality (*kāraṇatāvacchedaka)* of the cause of extraordinary perception. On this view, then, the limiter of the cause of extraordinary perception, say, of an object O, is nothing other than the property of being an awareness of O--in general, *tadviṣayakajñānatva*. The limiter of the effect of such a connection is the property of being an extraordinary perception of O.

54.185. HARIRĀMA TARKAVĀGĪŚA, *Kārakavāda*

Cf. NCat III, 377 for works by this name--are some of the entries manuscripts of this work?

54.186. HARIRĀMA TARKAVĀGĪŚA, *Kāraṇatāvāda*

Cf. NCat III, 379 for manuscript citations.

54.187. HARIRĀMA TARKAVĀGĪŚA, *Kartṛvāda*

NCat IV, 87 lists a manuscript citation at Oudh XV. 106

54.188. HARIRĀMA TARKAVĀGĪŚA, *Kāśīmaraṇakāraṇatāvāda*

We know nothing about this work except its title.

54.189. HARIRĀMA TARKAVĀGĪŚA, *Kevalānvayīvāda*

Again virtually unknown.

54.190 HARIRĀMA TARKAVĀGĪŚA, *Kevalavyatirekīvāda*

And again, unknown.

54.191. HARIRĀMA TARKAVĀGĪŚA, *Ktvāratyayāthavicāra* (?)

NCat V, 123b gives a manuscript citation at Oudh XV. 106.

54.192 HARIRĀMA TARKAVĀGĪŚA, *Maṅgalavāda*

The work has been edited, with illustrations (!), by Girolamo Donati (Perugia 1884).

54.193 HARIRĀMA TARKAVĀGĪŚA, *Muktivādavicāra*

Summary by Prabal Kumar Sen

Harirāma's *Muktivādavicāra* is an independent work dealing with the problems concerning liberation. Such problems, treated in *Nyāyasūtras* I.1.2, I.1.22 and IV.2.1-3 and 38-51, boil down to two issues: (1) the nature of liberation, and (2) the means of attaining liberation. Vātsyāyana, while commenting on these aphorisms, has maintained that liberation is the permanent cessation of frustration, as distinguished from the temporary cessation of frustration. This permanent cessation of frustration is brought about by knowledge of the sixteen categories enumerated in the Nyāya system. In this connection, Vātsyāyana has noted that according to a group of Naiyāyikas (*"nyāyaikadeśinaḥ"*) liberation consists in the experience of eternal satisfaction (*nityasukhābhivyakti*). This view is rejected by Vātsyāyana on the ground that there can be no satisfaction unalloyed with frustration, and hence, the presence of satisfaction is not compatible with the permanent cessation of frustrations. This view of Vātsyāyana has been accepted by most of the earlier Naiyāyikas, the sole exception being Bhāsarvajña, who reasserted and vigorously defended the sectarian view in his *Nyāyasāra* and *Nyāyabhūṣaṇa*.

Harirāma rejects both these views about the nature of liberation. In his opinion, liberation consists in the final cessation of the *cause* of frustration. The immediate cause of frustration is the result of bad deeds, i.e. sin (*durita*). Thus, for Harirāma, liberation consists in the final cessation of sin (*caramaduritadhvaṃsa*).

"E" references are to the edition by J. C. Bhattacharya, Calcutta 1959.

(E1-11) Harirāma starts the discussion with Udayana's definition of liberation as "permanent cessation of frustration", which is explained as "the destruction of suffering that is not

contemporaneous with the prior absence of a frustration that shares a locus in common with itself", or as "the destruction of suffering that is not contemporaneous with a frustration that shares a locus in common with itself". According to Harirāma, such formulations, while capturing the sense of Udayana's definition, are nevertheless non-uniform (*ananugata*), as they contain the word "self-" (*sva-*), which makes the expressions particularistic in character. Being particularistic in import they cannot be applied to all cases of liberation, so cannot serve as definitions of liberation.

(E13-22) Some Naiyāyikas try to evade this difficulty by defining liberation as the cessation of final frustration (*caramaduḥkhadhvaṃsa*). According to them, finality (*caramatva*) is a universal, and this removes the difficulty noted in the earlier definition. Such a universal must be admitted as a property constituting the limiter determining the property of being an effect of the awareness of the true nature of things.

According to Harirāma, finality cannot be regarded as a universal, as it is vitiated by cross-connection (*sāṃkarya*), Consequently, on close examination the new definition reduces to the first of Udayana's definitions and suffers from the same defects.

(E22-36) Harirāma now proceeds to examine some attempts at salvaging the previous definition. He draws our attention to the unanimous decision of Naiyāyikas that the insertion of a specific relation does not render a definition defective. Accordingly, instead of treating finality as a simple property, we might construe it as a property constituted by a specific relation, the relation being absence of contemporaneity with the prior absence of frustration in the same locus. But the definition cannot, after all, be salvaged, for a fresh difficulty crops up from an unexpected corner. According to the Naiyāyikas, the perceptible specific qualities of all-pervasive substances are destroyed by similar qualities that are subsequently produced in the same locus. Frustration is a perceptible specific quality of a self; the self is an all-pervasive substance. Thus the final frustration may in principle be destroyed by desire, etc. which are perceptible specific qualities of the self. Thus, the claim that the final frustration is destroyed by awareness of the true nature of things (*tattvajñāna*) cannot be beyond question, and this consequence is certainly undesirable.

In order to avoid this difficulty Harirāma now defines

liberation as the permanent destruction of sin (*caramaduritadhvaṃsa*). While sin is a specific quality of the self, it is not perceptible, and as such, it does not come within the scope of the rule mentioned above. On the other hand, the traditional Nyāya view that awareness of the true nature of things leads to liberation is left unscathed, for the ultimate source of sin is false awareness, which in its turn is destroyed by awareness of the true nature of things.

(E36-52) Harirāma now proceeds to examine the view that liberation consists in the experience of eternal happiness. He attributes this view to Tautātita Bhaṭṭa (whose identity cannot be established with certainty). Harirāma undertakes a minute examination of the scriptural passages cited in favor of this view, and he tries to show that the passages concerned admit of a different interpretations. He also tries to prove the superiority of his own view by invoking the principle of parsimony (*lāghava*).

(E53-93) Harirāma closes this monograph by discussing a knotty problem: the means of attaining liberation. Some philosophers maintain that the cause of liberation is the construction-free perception of the self. According to others, the cause is the yogic perception of God. Others maintain that the cause is a combination of awareness of the true nature of things with performance of religious duties. Some scriptural passages state that death at Varanasi or performance of daily prayers also lead to liberation. Harirāma rejects these views in favor of the traditional Nyāya view that knowledge of the self as distinct from body, mind, sense-organs, etc. leads to liberation.

54.194. HARIRĀMA TARKAVĀGĪŚA, *Navyadharmitāvacchedakatā*

Cf. MD 4250 for manuscript citation.

54.195. HARIRĀMA TARKAVĀGĪŚA, *Navyamatarahasya*

The work has been edited in *Nyāyanibandhāvalī*, op. cit., pp. 29-66. Also CSCR 20, pp 14-16 cites manuscripts in Calcutta.

Summary by V. Varadachari

The topic discussed here is the cause of inference. Udayana's view that consideration is the causal condition *par excellence* of inference is argued to be unnecessarily complex.

The reason offered for this is that the consideration "this mountain has fire-pervaded smoke" has as its subject-matter that collocation (*sāmānādhikāraṇya*) of fire and smoke which is responsible for our awareness of pervasion. Thus consideration should not be understood in Udayana's way.

Instead, the new school of Nyāya holds that the causal condition *par excellence* of inferential awareness is the cognition of negative pervasion between the *sādhya* and the *hetu*, because this view is simpler than the other. There is no harm when a positive inferential awareness arises from awareness of both positive and negative pervasion, since on this view a positive inference arises from awareness of negative pervasion.

The Mīmāṃsakas are cited as holding that presumption, not inference, arises from awareness of negative concomitance. They hold that only positive inferential awareness is valid inference.

54.196. HARIRĀMA TARKAVĀGĪŚA, *Nyāyapadārthatattva*

The Introduction to this work is translated by Girisa Chandra Raya in The Pandit 9, 1874-75, p. 243.

54.197. HARIRĀMA TARKAVĀGĪŚA, *Pakṣatārahasya*

Cf. CSCR 36, p. 254.

54.198. HARIRĀMA TARKAVĀGĪŚA, *Parāmarśarahasya*

Umesh Mishra (UM. p. 433) notes a manuscript of this work in the Ganganatha Jha Research Institute Library, No. 124/3027.

54.199. HARIRĀMA TARKAVĀGĪŚA, *Prāgabhāvavicāra*

Cf. CSCR 36, p. 493, which cites a manuscript held in Calcutta as justifying prior absence, refuting the views of opponents.

54.200. HARIRĀMA TARKAVĀGĪŚ, *Pramāṇapramoda*

Umesh Mishra mentions this work at UM, p. 433.

54.201. HARIRĀMA TARKAVĀGĪŚA, *Prāmāṇyavāda*

Edited by Visvabandhu Bhattacarya, Calcutta 1964. The summary below by Gaurinath Sastri is taken from his Introduction to Bhattacharya's edition, pp. i-vi.

Summary by Gaurinath Sastri

"Harirāma proposes to examine at the outset the Mīmāṃsaka view that the validity of a cognition is apprehended by the same collocation of causal conditions (*sāmagrī*) which enables us to apprehend the cognition itself (*jñānagrāhakasāmagrīgrāhya*) and finally explains the Naiyāyika view that the validity of a cognition is not apprehended by the *anuvyavasāya* which apprehends the cognition, but by something other than the *anuvyavasāya*.

"It is, therefore, necessary for us to see how the Mīmāṃsaka describes the *sāmagrī* for the apprehension of a cognition and in this context we may take note of the three different schools of Mīmāṃsā.

"According to the Prābhākara Mīmāṃsaka, cognition is self-luminous (*svaprakāśa*); the cognizing subject, the object of cognition and the cognition itself are apprehended at one and the same point of time. According to the Bhāṭṭa, cognition is not self-luminous, but it is inferred on the strength of a property, called cognized-ness (*jñātatā*), which is produced in the object through the cognition. According to Murārimiśra, another Mīmāṃsaka, a cognition is apprehended by a subsequent cognition known as *anuvyavasāya* or introspection. It is worthy of notice here that the Naiyāyika also thinks that a cognition is apprehended by what he calls *anuvyavasāya*. But there is a very fundamental point of difference between Murārimiśra as an advocate of *anuvyavasāya* and the Naiyāyika as an advocate of *anuvyavasāya*. The difference between the two lies in the fact that while Murārimiśra believes that *anuvyavasāya* apprehends a cognition as well as its validity, the Naiyāyika believes that *anuvyavasāya* apprehends the cognition only, but not its validity.

"To return to the point. Philosophers of the Nyāya and the Mīmāṃsā schools have been at variance with one another with regard to the manner in which the validity (*prāmāṇya*) of a cognition is apprehended. According to a section of philosophers all cognitions are dubious in nature (*saṃśaya*) and as such it is not possible to determine the validity or otherwise of any cognition. But this is not universally admitted; for there are philosophers who opine that it is possible to ascertain or apprehend the validity or otherwise of a cognition. Those who hold this view are, however, divided into two main groups: the advocate of the *svataḥprāmāṇya* theory and the advocate of the *paratahprāmāṇya* theory. The former again is divided into three camps: the Prābhākara, the Miśra-ite and the Bhāṭṭa. According

to all of these three views, the validity of a cognition is apprehended by the same *sāmagrī* (cognition of all causal conditions) as enables us to apprehend the cognition itself (*jñānagrāhakasāmagrīgrāhya*).

"The Prābhākara holds that, every cognition being self-luminous (*svaprakāśa*) by nature, the *sāmagrī* that produces a cognition not only enables us to apprehend the cognition itself, but also to apprehend its validity. It should be born in mind that by *validity* of a cognition we mean '*tadvati tatprakārakatva*'. To explain: a cognition is valid (*pramā*) if and only if the property *x* appearing as a qualifier (*prakāra*) in that cognition occurs in, or is possessed by, the object *y* which appears as the qualificand (*viśeṣya*) of that cognition. On a careful analysis, '*tadvati tatprakārakatva*' will resolve itself into '*tadvadviśeṣyakatvāvacchinnatatprakārakatva*'. To be precise, for a cognition to be valid it is also necessary that the qualifier-ness in the property *x* be *delimited* by the qualificand-ness of the object *y* which possesses *x*.

"In the above definition of a valid cognition we have mentioned three elements as its constituents: --

(1) *tadvattva* -- the property of the qualificand's possessing the qualifier *x*;

(2) *viśeṣyakatva* + *prakāratva* -- qualificand-ness + qualifier-ness,

(3) *avacchinnatva* -- the relation of delimitation between the two relational abstracts, i.e. qualificand-ness and qualifier-ness.

"Now, it is well known that when a cognition is apprehended such properties of the cognition as [the] cognition-universal (*jñānatva*) etc. are apprehended along with it. So we may say that other properties of the cognition, viz. qualifier-ness, are also apprehended by the same cognition. In a construction-filled cognition the qualificand *y* appears as qualified by the qualifier *x* and the same feature also becomes a part of the apprehension of such construction-filled cognition.

"Further, in the case of a construction-filled cognition, say 'a white flower', when the two properties, viz. white color and flower-ness, are apprehended the relation of concurrence between them is also apprehended provided the situation does not contain any definite impediment to it. Similarly, the relation of delimitation between the qualificand-ness and the qualifier-ness is also apprehended in the apprehension of a cognition which apprehends the two relational abstracts,

qualificand-ness and qualifier-ness. Thus the Prābhākara argues that when all the elements constituting the validity of a cognition are seen to be apprehended along with the apprehension of the cognition, it can be asserted that the validity of the cognition is apprehended in the apprehension of the cognition itself. The *svataḥ-prāmāṇya* theory is thus established.

"Murārimiśra holds that the *anuvyavasāya* or introspection of a cognition apprehends not only the cognition itself but also its validity. To be sure, the *sāmagrī* for the apprehension of a cognition in this view is identical with the *sāmagrī* for the *anuvyavasāya* or introspection. In the construction-filled cognition 'this is a jar' jar-ness appears as qualifying the object mentioned by 'this'. In the *anuvyavasāya* coming after it, the object mentioned by 'this' is grasped as the qualificand of the previous *vyavasāya* or construction-filled cognition. Now, in order to distinguish between the cognition 'this is a jar' and the collective cognition (*samūhālambana*) 'this is *and* a jar is', it should be said that while the *anuvyavasāya* of the latter does not register the relation of *delimitation* between the qualifier-ness and the qualificand-ness of the cognition concerned, the *anuvyavasāya* of the former does so register that relation. This amounts to saying that such *anuvyavasāya* also apprehends the validity of the cognition in question.

"The Bhāṭṭa maintains that cognition is not amenable to sense-perception (*atīndriya*) by nature but is apprehended through inference. When a jar is cognized a cognition of the type 'the jar is cognized' follows. In this second cognition the property cognized-ness (*jñātatā*) appears as a qualifier of the jar. The Bhāṭṭa posits this unique property, viz. cognized-ness, and argues that it is different from what we call *jñānaviṣayatā* or the property of being the content of a cognition. The property cognized-ness of the jar is also asserted to be perceivable by the sense-organ which perceives the jar. Now, the Bhāṭṭa says that just as a cognition is apprehended (i.e. inferred) on the strength of this property, viz. cognized-ness, the validity of that cognition is also apprehended by the same token.

"The *svataḥprāmāṇya* theory as explained above has been severely criticized by Gaṅgeśa in his *magnum opus*, the *Tattvacintāmaṇi*, and following him by Harirāma in the present text. Before we study the objection raised by them it is essential that a few fundamental points are clearly elucidated. First, a

cognition in the philosophy of the Mīmāṃsaka and the Naiyāyika is momentary (*kṣaṇika*) by nature. That is to say, it perishes on the third moment of its birth. Thus a cognition is born at one moment of time, it continues to exist for another moment and it dies out on the third. The position is, therefore, different from that of the Buddhist according to whom momentariness (*kṣaṇikatva*) means destruction of each entity on the second moment of its birth. Secondly, the Mīmāṃsaka agrees that the apprehension of validity of a cognition will be a certitude or a certain knowledge of such validity. For, a cognition usually becomes a certitude (*niścaya*) unless something is present in the situation to make it a dubiety (*saṃśaya*). Thus, according to the Prābhākara, the validity is apprehended, i.e. certainly known, by the *sāmagrī* which produces the cognition and at the same time does not contain any element that might apprehend its invalidity (cf. *aprāmāṇyāgrāhakajñānotpādakasāmagrīgrāhyatva*).

"Now, if it be held that the validity of a cognition is apprehended only by the *sāmagrī* of the same cognition, i.e. if the *svataḥprāmāṇya* theory is held to be true, it follows that in the third moment of its origin there cannot be any dubiety (*saṃśaya*) with regard to the validity of a construction-filled cognition (*vyavasāya*). For the cognition and a certitude of its validity do not cease to exist in the *second* moment of their origin and as such they will set aside any apprehension of invalidity. To be sure, dubiety being a sort of vacillating cognition between two contradictory qualifiers like '*a*' and 'not-*a*', the presence of a certain knowledge of validity in the *second* moment will rule out the possibility of dubiety in the third moment, since such dubiety, if it is to arise at that moment, will require both validity and its contradictory, viz. invalidity, as the qualifiers of the construction-filled cognition--but this is not possible in view of the fact that a certitude of validity being already there will serve as an impediment to the production of dubiety in the next moment.

"But it is a fact, so argues the advocate of the *parataḥ-prāmāṇya* theory, that we can sometimes doubt as to the validity of a cognition in the third moment of its origin. This forces the Naiyāyika to conclude that the validity of a cognition is apprehended through something else over and above the *sāmagrī* for the apprehension of that cognition.

"Gaṅgeśa advances the above argument and Harirāma follows him to some extent in refuting the *svataḥprāmāṇya*

theory. But in addition, Harirāma also points out that the Prābhākara bases his theory of *svataḥprāmāṇya* on the theory of the self-luminosity (*svaprakāśatva*) of cognitions. Thus the Prābhākara view can be easily destroyed by refuting the thesis that cognition is self-luminous. In reply to the Bhāṭṭa, Harirāma points out that the contention for an additional property of *jñātatā* or cognized-ness is a myth. It is actually indistinguishable from *jñānaviṣayatva* or the content-ness of a cognition. Moreover, the assumption that cognition is not amenable to sense-perception (*atīndriya*) is wrong."

54.202. HARIRĀMA TARKAVĀGĪŚA, *Pratibandhakatāvicāra*

Umesh Mishra (UM, p. 433) indicates this work has been published.

54.203. HARIRĀMA TARKAVĀGĪŚA, *Pratiyogijñānasya kāryakāraṇabhāva*

A manuscript is held at the Calcutta Sanskrit College Library, and is listed in CSCR 20, pp. 7-8, #8, which remarks: "The manuscript deals with the knowledge of *pratiyogin* or that of which negation is to be affirmed, i.e., [the] counterpositive, that which is negated in the perception of negation (*abhāva*)."

54.204. HARIRĀMA TARKAVĀGĪŚA, *Pratyāsattivicāra*

We know nothing about this work but its title.

54.205. HARIRĀMA TARKAVĀGĪŚA, *Vicāra* or *Matavādārtha* on Tarani Miśra's *Ratnakośa*

"E" reference are to the edition by Sobhakanta Jayadeva Jha Sarma, Darbhanga 1966).

Summary by V. Varadachari

(E1-2) According to Tarani Miśra, author of the *Ratnakośa*, there are in what is called "counterbalance" two distinct *hetus* proving two opposed *sādhyas*. Therefore, there should be two considerations contradicting each other. Now an inferential awareness arising from two contradictory considerations can only be of the nature of doubt. Why, then, should we treat counterbalance as a fallacy, since both *hetus* do in fact prove their respective *sādhyas*?

(E2-17) If counterbalance is to count as a fallacy, then at least one of the *hetus* must be flawed. But which one? Taraṇi

Miśra suggests that of the two *hetus*, the one which is put forth in the inference proffered shall be called the "obstructed" (*pratibādhya*), the other *hetu* the "obstructor" (*pratibandhaka*).

(E19-36) The question arises whether other types of awareness--perceptual, verbal, as well as inferential--cannot play the roles of obstructor and obstructed in various ways. If so, will not the result be unnecessarily complex, and shouldn't it be avoided?

(E39-50) Having discussed these issues, Taraṇi Miśra argues that there is no way of avoiding the conclusion that counterbalance produces doubt and thus is not a fallacy. Harirāma argues that the counterbalancing *hetu* should be treated as an obstructor, and thus that the possibility of doubtful inferential cognition does not arise.

54.206. HARIRĀMA TARKAVĀGĪŚA, *Sāmagrīvicārarahasya*

A manuscript is held at the Calcutta Sanskrit College Library, corresponding to the works numbered 1130 and 1084 and described in CSCR 20, pp. 6-7, which provides the following brief description: "This is a short treatise on Navya-Nyāyavādārtha. It establishes how a combination of several causes in its entirety goes to produce a thing, by showing that in the case when all the causes of perception (*pratyakṣa*) and those of inference (*anumāna*) exist simultaneously, the latter are kept back by the former, which come first into operation."

The editors of CSCR 20, p. 6 note that "this work is printed as *Atha Sāmagrīpratibandhakatāvādavīciḥ* in pp. 189-202 of *Vādavaridhi*, published in the Chowkhamba Sanskrit Series, Nos. 446, and 468, Banaras 1940, where the name of the author is wanting. The name of the author is not mentioned in our manuscript but on examination it comes out to be Harirāma Tarkavāgīśa."

54.207. HARIRĀMA TARKAVĀGĪŚA, *Sāmānyalakṣaṇavicāra*

Cf. CSCR 36, pp. 301-302, 493-495 for manuscripts.

54.208. HARIRĀMA TARKAVĀGĪŚA, *Saṃśayapakṣatāvicārarahasya*

A manuscript is held at the Calcutta Sanskrit College Library. See CSCR 20, #s 1089 and 1135, pp. 13-14, described thus: "It deals with *pakṣatā*. *Pakṣa* (a subject) is that in which there is no certainty of the thing to be inferred bereft of the desire to infer the same. *Pakṣatā* is the *dharma* of *pakṣa* which

involves *saṃśaya* (doubt). Literally *pakṣatā* means 'the nature of deliberative discussion'."

54.209. HARIRĀMA TARKAVĀGĪŚA, *Smṛtisaṃskāravādavīci*

This may have been edited in the Benares Sanskrit Series, although we have been unable to locate it.

54.210. HARIRĀMA TARKAVĀGĪŚA, *Vāyuvicāra*

Cf. CSCR 36, p. 493 for information.

54.211. HARIRĀMA TARKAVĀGĪŚA, *Viṣayatāvāda*

"ET" references are to the pages of the edition and translation by V. N. Jha, Publication of the Centre of Advanced Study in Sanskrit of the University of Poona, Class C, No. 16, Poona 1987. Jha's edition is based on an earlier edition by Balakrishna Mishra and Dhundhiraja Shastri in the collection entitled *Vādavaridhi*, published from Banaras in 1940. Prof. Jha has also provided a thirteen-page summary (pp. xxix-xlii), which we have used as a guide here while interpolating the renderings of the technical Navya-Nyāya terminology that we are using throughout the present volume. Jha's exposition of the text makes use of helpful diagrams to clarify the relationships which are tortuous as rendered in English.

Prof. Jha believes that verses 95-101 of the text are in fact all or at least a portion of a commentary on our present work by Raghudeva Nyāyālaṃkāra, since the latter portion controverts the opinions found in the earlier. Although the matter is certainly not beyond dispute, we shall follow Jha's lead and place the summary of those final verses under Raghudeva.

1-6 (ET1-12) The old (Nyāya-Vaiśeṣika) view is that content-ness (i.e., being the content of an awareness, desire or volition) is a self-linking connector connecting those qualities of a self with their content, and not something additional.

But that view is incorrect. A qualified awareness has three contents: a chief qualifier (*prakāra*), a qualificand (*viśeṣya*) and a relation (*saṃsarga*) between them. If content-ness (*viṣayatā*) is construed as the very nature of a qualified awareness, then in the (distinct) awarenesses "the ground has a pot on it" and "the pot is on the ground" the content-ness will be the same, which is evidently not the case. Furthermore, there could be no such thing as a *samūhālambana* awareness (i.e. an awareness with more than one content, such as "these two things are pot and cloth"), since the qualificand-ness in the pot will become identical with the qualificand-ness in the cloth (since there is only one awareness). Moreover, there will be no difference between the analyses of "there are pot, ground, and contact" and "the pot is located on the ground by contact", since the content-ness of each is the same.

For this reason content-ness must be accepted as something different from and additional to both the awareness and its content. And this content-ness is related to the content by locus-ness (*āśrayatā*) and to the awareness by describer-ness (*nirūpakatā*).

7-19 (ET14-28) Likewise content-possessor-ness (*viṣayitva*) must also be admitted by parallel reasoning.

Objection: Why not make content-possessor-ness be the referent-ness (*pratiyogitā*) of content-ness and avoid making at a new category?

Answer: There is no more reason to make the one the new category rather than the other, so we accept them both.

There are many content-nesses (and content-possessor-nesses), since there is a different one in each content. And there are two sorts of content-ness: (1) a content-ness which is not described by another content-ness, and (2) a content-ness which is described by another content-ness. The former sort is construction-free awareness, the latter construction-filled awareness. The "other content-nesses" by which a construction-filled awareness is qualified include (chief)-qualifier-ness, qualificand-ness, and relation-ness, and the correct relationship between all these qualifiers

20-25 (E28-34) Qualificand-ness and (chief)-qualifier-ness are themselves to be classified into two varieties: (1) that which is limited (*avacchinna*) by some property, and (2) that which is not limited by any property. A case of type (1) of qualificand-ness is "the pot (is) on the ground", where the qualificand-ness in the ground limited by the qualifier-ness in the pot is described by ground-ness. A case of type (1) of (chief)-qualifier-ness is "(this is) an awareness where a pot is the qualifier"; here the qualifier-ness of the pot is limited by pot-ness. A limiter must have the same locus as what it limits. But the qualificand-ness limited by x is not described by the qualifier-ness in that x; there is no reason to suppose it is (in general).

29-30 (ET37-39) Objection: If this proposal is accepted

it will be difficult to distinguish awareness (a) "the ground possesses a pot" from (b) "the ground is the ground", since both have a content-ness of ground limited by ground-ness; thus one is likely to remember the latter rather than the former.

Answer; No, for although (a) and (b) both involve ground limited by ground-ness, still the limiter of the ground in (a) is ground possessing a pot while that of (b) merely speaks of the ground limited by ground-ness, so the two awarenesses are different.

31-34 (ET40-44) Limiters are of two sorts: (1) a limiter which is limited by another limiter; (2) one which is not. An example of (1) is "the ground possesses a universal", where it is ground-ness that is the universal the ground possesses, and it is limited by the property of being a universal. An example of (2) is "the ground has a pot (on it)", where the ground-ness is not limited by any property. So a limiter may have a limiter qualifying it.

35-37 (ET44-47) Content-ness-ness (*viṣayatātva*), being a property held by all the content-nesses such as qualifier-ness, qualificand-ness and relation-ness, has also to be accepted as a distinct kind of entity; otherwise we could not make generalizations about such things being content-nesses, etc. Likewise one must accept limiter-ness-ness, qualifier-ness-ness, qualificand-ness-ness, etc.

38-42 (ET48-55) One thing can be both a qualifier (of one awareness) and a qualificand (of another).

43-56 (ET57-72) Objection: Likewise designated-ness (*vidheyatva*) and explained-ness (*uddeśyatā*) are different kinds of content-ness, for the after-cognition of each is different from that of the other, and that difference has to be explained in a satisfactory analysis.

Answer: But a content of the after-cognition "I inferred fire on the mountain", say fire, is both the qualifier and the designator of that after-cognition.

Objector: But if designated-ness is not accepted as a distinct entity, then what can be the limiter of the *pakṣatā* (cf. EnInPh Volume Six, p. 193), since we have assumed the presence (not the required absence) of knowledge (of, e.g., fire on the mountain)?

Answer: No, for that limiter can be taken to be "being an inferential awareness having a qualificand-ness limited by mountain-ness and not described by a property other than fire-ness".

Objector: Then that limiter of the *pakṣatā* must be illusory!

Answer (of the author or *siddhāntin*): No, since in such a case (where I infer fire on something else, or something else on the mountain) the judgement is perfectly true!

57-63 (ET72-80) Objector: O.K., we'll postulate designator-ness only; designated-ness can be identified with qualificand-ness. And we'll need to postulate designated-ness-ness also as the common qualifier of all the designated-nesses.

(Answer): Then it is not necessary to postulate more than one designated-ness, as your designated-ness-ness can itself be the qualifier of qualifier-ness, etc.

Objection: Then qualificands will be conflated with qualifiers.

Answer: No, since in "there is fire on the mountain" the mountain is already known and the fire is known now for the first time, we can easily tell a qualificand from a qualifier, and if we do not recognize two distinct items, qualificand-ness and qualifier-ness, the sentences "fire is on the mountain" and "the mountain has fire on it" will not be distinct verbal cognitions.

70-76 (E89-97) We do not postulate content-ness (or designated-ness) on the ground of simplicity, though indeed it is the simpler view; rather, we are merely extending the account in terms of designated-ness, which the opponent accepted above and which we call "content-ness", to cases such as "the mountain has fire", etc.

Objection: But this solution will not work in other cases, e.g., in "there is difference from other things in earth" or in judgments involving multiple qualificands, since "being different from other things" is a predicate as well as a qualificand. The problem can be avoided if designated-ness is equated with (chief)-qualifier-ness.

Answer: Again the designated-nesses can be specified for these cases too, although they get difficult to state succinctly.

77-87 (E101-116) Likewise, in the case of a postulated (*āpādyata*) awareness (as in a *tarka* argument), if postulated-ness is accepted as content-ness it will follow that in "if there were no fire there would be no smoke" fire as well as smoke will be postulated (whereas the context suggests that smoke is in fact known to be present.)

Objection: Then let the postulated-ness be defined as "being the content of the postulation produced from an ascertainment of the absence of that which is postulated".

Answer: No, for even one who does not know that x is absent, and so cannot remember such a thing, can still judge that there is fire on the mountain. Your definition will not apply, e.g., to an awareness of the form "I imagine fire on the mountain".

Objector: There, in an after-cognition, it is the imaginative awareness (not the fire) which is the content of the judgment ("I imagine fire on the mountain"). And imaginative awareness constitutes a separate type of awareness. This involves no difficulty about judgments with multiple qualificands.

Answer: That difficulty can be resolved by a further specification in the definition of postulated-ness so as to preclude the limiters of contents other than those that are produced from an ascertainment of the absence of that which is postulated.

88-94 (ET117-126) The discussion about postulated awareness is continued at some length.

The text as we have it concludes with more arguments on the last topic. Prof. V. N. Jha, the editor and translator, considers these to be actually a section of a commentary on this work by Raghudeva Nyāyālaṃkāra Bhaṭṭācārya.

54.212. HARIRĀMA TARKAVĀGĪŚA, *Viṣayavādavīci*

It is not clear whether this is the same text as the previous one. It was allegedly edited in the Benares Sanskrit Series, not found as yet by this Editor.

54.213. HARIRĀMA TARKAVĀGĪŚA, *Viśeṣaṇajñānarahasya*

A manuscript (#1093) of this work is held at the Calcutta Sanskrit College Library. See CSCR, p. 21.

54.214. HARIRĀMA TARKAVĀGĪŚA, *Viśiṣṭavaiśiṣṭyabodhavicāra*

Umesh Mishra indicates this work has been published.

54.215. HARIRĀMA TARKAVĀGĪŚA, *Vyāptyanugamarahasya*

A manuscript of this work is held at the Calcutta Sanskrit College Library; see CSCR 20, #19(3) on pp. 21-23. ita mentioned 1559 A.D.

54.216. HARIRĀMA TARKAVĀGĪŚA, *Yogyatābhāva*

Cf. CSCR 36, p. 320-322 for description.

55. VIŚVANĀTHA NYĀYASIDDHĀNTA PAÑCĀNANA (1635)

A prolific writer, regularly taken as the author of the *Bhāṣāpariccheda* and *Siddhāntamuktāvalī* (which were actually written by Kṛṣṇadāsa Sārvabhauma Bhaṭṭācārya; cf. #25 above), Viśvanātha was the son of Vidyānivāsa Bhaṭṭācārya and the younger brother of Rudra Nyāyavācaspati. He wrote the *Nyāyasūtravṛtti* in 1634. (See UM, p. 435 for evidence of t his fact.) According to Gopinath Kaviraj (GK p. 74, note 35), Viśvanātha's father was himself the son of the younger brother of Vāsudeva Sārvabhauma. Gopinath adds: "(He) is said to have been highly honoured by Rājā Mansingh of Amber, and (to have) defeated, in a public assembly at the Court of Ṭoḍarmall, the great scholar Nārāyana Bhaṭṭa of Benares." He seems to have been a Vaiṣṇava, and is said to have spent his last years at Vṛndāvana; according to Gopinath. He composed his commentary ("commentaries", says Gopinath) on the *Nyāyasūtras* there in "1654" (does he mean "1634"?).

55.217. VIŚVANĀTHA NYĀYASIDDHĀNTA PAÑCĀNANA, *Bhedasiddhi*

This work has been edited by Surya Narayana Sukla in Princess of Wales Saraswati Bhavana Texts 42, 1993.

55.218. VIŚVANĀTHA NYĀYASIDDHĀNTA PAÑCĀNANA, Commentary on Raghunātha Śiromaṇi's *Nañvāda*

Cf. NCat IX, 324 for manuscript citations.

55.219. VIŚVANĀTHA NYĀYASIDDHĀNTA PAÑCĀNANA, *Nyāyatantrabodhinī*

Manuscript at Divakara Ganaka, Banaras.

55.220. VIŚVANĀTHA NYĀYASIDDHĀNTA PAÑCĀNANA, Commentary on Annambhaṭṭa's *Tarkasaṃgraha*

See NCat VIII, 132 for manuscript citations.

55.221. VIŚVANĀTHA NYĀYASIDDHĀNTA PAÑCĀNANA, *Kārakacakra*

NCat III, 374 lists manuscripts of this work "on case relations". Chakravarti (p. 287) provides an alternative title, *Subarthatattvāloka*.

55.222. VIŚVANĀTHA NYĀYASIDDHĀNTA PAÑCĀNANA, *Tattvāloka* on Raghunātha Śiromaṇi's *Padārthatattvanirūpaṇa*

Manuscripts of this work exist in various places around India. See the entry in the Bibliography of Indian Philosophies, Third edition, under 1179.8. Cf. also CSCR 36, pp. 261-262., which comments "The most outstanding feature of this commentary is that it is not satisfied with the mere explanation of the passages concerned but it deals, in addition to that, with the views of its predecessors in some details."

55.223. VIŚVANĀTHA NYĀYASIDDHĀNTA PAÑCĀNANA, *Tattvajñānavivṛddhiprakaraṇa*

NCat VIII, 43 cites manuscripts of this.

55.224. VIŚVANĀTHA NYĀYASIDDHĀNTA PAÑCĀNANA, *Ṭīkā* on Raghunātha Śiromaṇi's *Ākhyātavāda*

Cf. NCat II, p. 9b for manuscript citations.

55.225. VIŚVANĀTHA NYĀYASIDDHĀNTA PAÑCĀNANA, *Upapattisamaprakaraṇa*

NCat II, 368a cites a manuscript of this. An alternative title is *Tattvānuśāsana*.

55.226. VIŚVANĀTHA NYĀYASIDDHĀNTA PAÑCĀNANA, *Vṛtti* on Gautama's *Nyāyasūtras*

Partly translated by J. R. Ballantyne. Three volumes, Allahabad 1850-1854. It has been edited a number of times; cf. entries under #1179.4 in EnInPh Bibliography.

55.227. VIŚVANĀTHA NYĀYASIDDHĀNTA PAÑCĀNANA, *Ālaṃkārapariṣkara*

Chakravarti (p. 287)describes this as a work "on the nature of verb and the meaning of tenses and moods".

56. GAURĪKĀNTA SĀRVABHAUMA BHAṬṬĀCĀRYA (1635)

Various of our sources assign this author to the earlier part of the 17th century. In his commentary on the *Tarkabhāṣā*, notes Gopinath Kaviraj, "Gaurīkānta alludes very frequently to the views of Balabhadra and Govardhana, and vehemently denounces them as erroneous." (GK p. 67) Govardhana Miśra seems have to been writing in 1578, and Balabhadra may have been his father. "Mādhava Deva...at the end of the 17th century...quotes and criticizes the opinion of Gaurīkānta". (GK, p. 287) NCat VI, 236 says that Gaurīkānta was "of the Rāṭha family of north Bengal; student of Bālakṛṣṇa Sarasvatī; later than Govardhana whom he criticizes and earlier than Mādhavadeva who criticizes him", thus agreeing with Gopinath's opinion.

Gaurīkānta wrote works of literature and on rhetoric. Chakravarti (p. 284) ascribes to him an *Ānandalaharītarī*, "a commentary on Śaṃkarācārya's poem to *Śakti*", and a commentary on Dharmadāsa's work, *Vidagdhamukhamaṇḍanaviṭikā*, on rhetorical enigmas.

56.228. GAURĪKĀNTA SĀRVABHAUMA BHAṬṬĀCĀRYA, Commentary on Gautama's *Nyāyasūtras*

See NCat VI, 237 for manuscript citations.

56.229. GAURĪKĀNTA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Vaiśeṣikabhāṣyavivaraṇa* on Praśastapāda's *Padārthadharmasaṃgraha*

See NCat VI, 237. Gopinath Kaviraj writes: "I find (it) mentioned under the title of *Vaiśeṣikabhāṣyavivaraṇa* in his *Bhāvārthadīpikā*" (GK p. 67).

56.230. GAURĪKĀNTA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Sadyuktimuktāvalī*

Cf. NCat VI, 237 for manuscript citations.

56.231. GAURĪKĀNTA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Bhāvārthadīpikā* or *Vivaraṇa* on Keśava Miśra's *Tarkabhāṣā*

Cf. NCat VII, 236; VIII, 119 for manuscript citations. Two manuscript citations from Calcutta are cited in CSCR 20, pp. 104-105.

Extracts from this commentary are given in the English notes on the edition of *Tarkabhāṣā* with the commentary of Govardhana edited by S. M. Paranjpe (op. cit., our "N".

This commentary is available up to the end of the first section, on *pratyakṣa*. The author claims to have written this commentary with the skill exhibited by Raghunātha Śiromaṇi in his commentary on the *Tattvacintāmaṇi*.

Summary by V. Varadachari

(N2) Gaurīkānta provides adverse criticisms of Govardhana's commentary. At the very outset he rejects Govardhana's interpretation of the word "*tattvajñāna*" as meaning *śāstra* on the ground that a *śāstra* cannot lead to liberation. Balabhadra, perhaps the father of Govardhana, is also mentioned here and his interpretation is refuted.

(N4) Govardhana's interpretation of the specificity (*asādhāraṇatva*) of a definition as meaning the dissimilar feature is rejected by the author. Balabhadra is stated to have taken this as the *hetu*'s not existing in some cases while being present in some cases or else as not existing in all cases. Both Govardhana and Balabhadra are termed "barbarians" or low fellows, since (it is said) they have not noticed that the definition will have the result that the dissimilar feature will not apply to any case.

(N5) The text interprets the term *karaṇa* as meaning an excellent [*par excellence*] cause, and says that excellence here consists, according to early Nyāya writers, in having an operation (*vyāpāra*), but, according to later writers, in not being dependent on any other auxiliary cause which is produced after its coming into being.

(N12) While explaining the text that states that an absence has only an instrumental cause and not the other two kinds of causes, we are told that the absence here meant can only be of the annihilative kind Other kinds of absence are not produced.

(N15) To account for the rise of perceptual judgments the text reproduces the axiom of the Nyāya school that the self gets connected to the internal organ, the internal organ to the sense-organ, and the sense-organ with the object. The commentator writes that contact between the skin and the internal organ must also be included. It is only in deep sleep that the internal organ enters into the tubular vein called *purītat*. Otherwise it is in touch with the skin, and this contact is essential for all kinds of perceptual awareness.

While explaining the word "*nirvikalpaka*" ["construction-free"] Govardhana writes that it is free from ideation (*yojanā*) and does not include the relation between the object and its property. Gaurīkānta is vehement on this and refers to Govardhana ridiculously as having the wisdom of a cow (*gobuddhi*). He means that the relation becomes the content of a construction-free perception. For example jar, jar-ness and inherence between them [each] form the contents of a

construction-free perception, but there is not then the awareness of properties and so there is no awareness of the object as qualified by properties.

(N16) The text mentions the sense-organ, contact between organ and object, and awareness as the three kinds of instrument for the arising of perceptual awareness. For instance, the sense-organ is the instrument for the rise of construction-free awareness. The awareness of one's desire to abandon certain object, to grasp some of them and remain indifferent towards others, is produced by the instrument of construction-free awareness. It is then said that someone had maintained that the sense-organ itself is the instrument of construction-filled awarenesses also. Gaurīkānta remarks that the interval between the rise of construction-free and construction-filled perception is subtle. It is not actually noticed, so construction-filled awareness is taken to follow construction-free. Hence the early writers held that for perception awareness is the instrument. Otherwise, the definition of awareness being the instrument will not apply here. This is a weak point in his treatment of the nature of an instrument. That is why the author refers to the correct view by introducing it as "someone says".[1]

Govardhana is again condemned as having the wisdom of an animal for describing construction-filled perception as having ideation and involving a relation. Gaurīkānta remarks that this over-extends to a construction-free perception which has a relation for its content.

(N18) The Nyāya-Vaiśeṣika schools admit the relation between a quality and a thing qualified by it as a condition for perceptual awareness of an absence. For instance, the ground, which does not have a jar on it, has absence of jar as the qualifier. Gaurīkānta remarks that the words *viśeṣaṇa* (qualifier) and *viśeṣya* (qualificand) must be taken in an unusual sense here. The absence of jar is not a quality but is taken to determine the presence of an absence there. It is a particular

[1]Gaurīkānta's version is not correct. Introduction of a view by saying "someone says" (*atra kañcidāha*) is generally taken as mentioning the opinion of a section of scholars whose views are not shared by the authentic exponents of the school The author's view must favor the theory that there are three kinds of instruments working to produce the arisingl of perceptual awareness.

kind of self-linking connector. Hence "qualifier" shall be taken as meaning the contained (*ādheya*) and "qualificand" as meaning the container or locus (*ādhāra*) in this case.

56.232. GAURĪKĀNTA SĀRVABHAUMA BHAṬṬĀCĀRYA, Commentary on Annambhaṭṭa's *Tarkasaṃgraha*

A manuscript on this is cited by NCat VI, 237 at B. IV. 18.

56.233. GAURĪKĀNTA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Ṭīkā* on a *Tarkabhūṣaṇa*

A manuscript of this is noted in NP I, 124.

56.234. GAURĪKĀNTA SĀRVABHAUMA BHAṬṬĀCĀRYA, *Vivecana* on Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

Referred to but as yet not known to be preserved.

57.KAUṆḌA BHAṬṬA (1640)

This well-known grammarian (cf. EnInPh Volume Five #37, pp. 255 ff.) was the son of the Vedāntist Raṅgoji Bhaṭṭa and the nephew of Bhaṭṭoji Dīkṣita. He is held to have "defeated the Dvaita scholar Vidyādhiśayati (1619-31 A.D.) in debate at the court of Keladi Veṅkaṭaṭappa (1529-1629)" (quoted from NCat V, p. 92), and to have been a pupil of Anantadeva. We may estimate his date as around 1640. In addition to his several works on Grammar he is said to have written a work on Bhāṭṭa Mīmāṃsā and the works cited below on Nyāya.

Anantalal Thakkura (ODVS p. 360) gives a bit more information. "Kauṇḍa's father was Raṅgojī Bhaṭṭa and he (Kauṇḍa) was a resident of Varanasi." S. D. Joshi, however, in the Introduction to his translation of Kaunda Bhaṭṭa's *Vaiyākaraṇabhūṣaṇasāra*, (one of the works on Grammar), believes his family originated in South India, citing P. K. Gode.

57.235. KAUṆḌA BHAṬṬA, *Padārthadīpikā*

Edited by Ramakrishna Sastri, Benares Sanskrit Series 14, 1900. This is our "E".

Anantalal Takkura describes the work as follows (ODVS p. 360): "The tract is just like the *Tarkasaṃgrahadīpikā*. Categories have been divided into two, positive and negative. Negative category is 'negation' [i.e., absence]. Mīmāṃsakas have been contended in the topics of air (E5), mind (E7), darkness (E7), conjunction (E13) and the like. The Nyāya theories of *pīṭharapāka* (E10) (the theory of cooking of a pot etc. taking place even when they remain intact as a whole and not reduced to atoms), analogy to be a separate type of *pramāṇa* (E26-29), and the like have been refuted.

"He touches [on] the *Tarkikarakṣā* [of Varadarāja] verse enumerating the different *pramāṇas* admitted by different schools of philosophy (E16-17).

"As the author hails from a Vaiyākaraṇa family, his bias towards the grammatical exposition of verbal testimony is well suited. And he refers to his *Vaiyākaraṇabhūṣāṇa* for further information (E39).

"The author just like Annambhaṭṭa expresses his motive to write the *Padārthadīpikā* as to make intelligible to the novices: *bālabuddhiprakāśārthaṃ padārthānāṃ pradīpikā*" (E51)."

57.236. KAUṆḌA BHAṬṬA, *Tarkapradīpa*

Gopinath Kaviraj (GK p. 83) states that a manuscript of this work exists in the Government Sanskrit Library in Banaras, and that it was written at the instance of Rājā Vīrabhadra. NCat 5, p. 92b dates this King at 1629-1645, which further confirms the dating estimated above. Kaviraj (ibid.) lists the authors and works cited by Kauṇḍa Bhaṭṭa, including his *Vaiyākaraṇabhūṣaṇa*. Manuscript citations are provided at NCat V, 92 and VIII, 116)

57.237. KAUṆḌA BHAṬṬA, *Tarkaratna*

Apparently no longer extant, this work is referred to in the *Tarkapradīpa*. NCat cites Hall, p. 78 for manuscript discussion.

58.PEḌḌA DĪKṢITA (1645)

NCat VIII, 38 lists this writer as "of Kaundinyagotra, pupil of his paternal uncle Dharmarājadhvarīndra", and he had a son named Triveni Nārāyaṇa Dīkṣita (DM, p. 71). We may thus estimate that he was alive in 1645. He also wrote works on Bhāṭṭa Mīmāṃsā and on Advaita Vedānta.

58.238. PEDDA DĪKṢITA, *Sāra* on Rucidatta's *Tattvacintāmaṇiprakāśa*

The *Pratyakṣa* chapter of this work up to

Nirvikalpakavāda is available in manuscript. Cf. NCat VIII, 38.

59.MURĀRI BHAṬṬA (1645)

P. K. Gode (Annals of the Bhandarkar Oriental Research Institute 12, 1930-31, 291-293) says a manuscript of #239 shows that the author of that commentary must have lived before 1650. His father's name is given as Gaṅgādhara, his teacher's as Padmanābha Bhaṭṭa (NCat VIII, 121).

59.239. MURĀRI BHAṬṬA, *Prakāśa* on Keśava Miśra's *Tarkabhāṣā*

NCat V, 196 give TD. 6370 as a manuscript location.

60.RĀMAKṚṢṆA ADHVARĪNDRA (1650)

The son of Dharmarājādhvarīndra, thus he musg have flourished around 1650. He was a well-known author of a number of texts representing a variety of *darśanas*, including Mīmāṃsā, Advaita Vedānta and Sāṃkhya, as well as Nyāya. V. Swaminathan (in *Preceptors of Advaita* (Secunderabad: Sri Kanchi Kamakoti Sankara Mandria, 1968), pp. 265-275, provides a lot of information: "(He) hailed from Kandaramāṇikkam, a village in the Nannilam taluk of Tanjore district....the son of Dharmarājādhvarin....he was a Kauṇḍinya by descent and a Ṛgvedin by religious discipline....Dharmarāja studied under several preceptors among whom he mentions only one by name, viz. Venkaṭanātha, a resident of the village of Velāṅguḍi in Kumbhakonam taluk. His grand-preceptor was the famous Nṛsiṃhāśrama the author of several polemical works on Advaita." The Vedānta works mentioned by Swaminathan include a commentary, *Vedāntasāraṭīkā*, on Sadānanda's *Vedāntasāra* and the *Vedāntśikhāmani* on his father's *Vedāntaparibhāṣā*. He also is credited with writing a Pūrvamīmāṃsā work, *Nyāyadarpaṇa*, "a gloss on the *Pūrvamīmāṃsāsūtras* offering detailed explanations on the *sūtras*. Unfortunately only a fragment...has come to light so far."

60.240. RĀMAKṚṢṆĀDHVARĪNDRA, *Nyāyaśikhāmani* on Rucidatta's *Tattvacintāmaniprakāśa*

This text has been partly edited; see the edition of the *pratyakṣa* portion of Rucidatta's *Prakāśa* with commentaries by N. S. Ramanuja Tatacarya from Tirupati in 1973. The part edited runs from the beginning of that portion to the end of the *Vāyupratyakṣavāda*. "E" reference are to this edition.

V. Swaminathan (in the article cited two paragraphs back, p. 268) argues that Rāmakṛṣṇādhvarīndra wrote the present work to complete his father's unfinished commentary *Tarkacuḍamaṇī*, our #46.127 above.

Summary by V. Varadachari

The worth of the *Nyāyaśikhāmaṇi* cannot be adequately described. Rucidatta's references to the view of his predecessors are clarified by Rāmakṛṣṇādhvarīndra, who reports that the views maintained by "Upādhyāya" (presumably Yajñāpati Upādhyāya) and by Jayadeva Miśra aroused much controversy. Rucidatta is also shown not to be lacking in courage in rejecting the interpretations of his preceptor Jayadeva (whom he refers to as "Jagadguru") whenever they are found to be unacceptable.

There are two aspects worth noting in this commentary. One is that the author frequently uses expressions like "*idaṃ cintyam*", meaning "this is to be considered" and "*vastutaḥ*" meaning "really speaking". Expressions such as these show that the author is considerate of the opinions expressed by others. The second aspect is that he does not refrain from offering his own views.

(E3) Regarding the creation of the world filled with misery, the commentator remarks that this creation is in accordance with the residues of the deeds done by beings. During the periods of creation, protection and destruction God takes on a form without which the composition of the Vedas and spreading writing scripts etc. could not be explained. Taking up a body on these occasions does not mean that God will have to be treated as knowing and of limited power, for God is all-knowing and has immense power. If this is not conceded, the universe would not have been created by Him.

(E23) There is reference to a "*Khaṇḍanoddhāra*" in the section on *maṅgala*. Since Vācaspati Miśra does not discuss the topic of *maṅgala* the reference is presumably to Vardhamāna's *Khaṇḍanakhaṇḍakhādyaprakāśa*.

(E197-198) While discussing the validity of awareness the text takes up the question as to the possibility of there being doubt regarding ascertainment of truth. Rucidatta enters into a discussion on the nature of doubt. Rāmakṛṣṇa notes the view of some scholars who maintain that doubt is caused by the sight of a common feature, by that of an uncommon feature and by

that of a contradictory feature produced by wrong understanding. What pertains to the feature should be related to the object having that feature. So the awareness of the property-possessor shall be taken as the cause with reference to doubt. This view is questioned. The sight or knowledge of common, uncommon and contradictory features will mutually overlap. What cannot be exclusively related to each of the three cannot be the cause. Otherwise, according to each, doubt must be admitted to have varieties, and such variety is not noticed in the case of doubt. It is not therefore proper to recognize three kinds of doubt.

(E303-399) Rāmakṛṣṇa offers a fine resumé of the Nyāya theory of truth. Truth both in production and knowing is interpreted as extrinsic. Opponents, viz. Mīmāṃsakas, also maintain extrinsic validity. Yet the method adopted by each is different. The Bhāṭṭa school holds that sublation is what makes a false awareness erroneous. The Nyāya school considers that the defects in the causes that produced an awareness accounts for falsity, and rejects the explanation offered by Mīmāṃsā, preferring the Nyāya *anyathākhyāti*. Therefore Gaṅgeśa does not directly offer any adverse criticism on the argument put forward in defense of extrinsic invalidity.

(E407-408) So intrinsic validity remains to be criticized and refuted. The causes which produce an awareness also produce a true or false awareness and do not have any specific trait that produces true awarenesses only. Nor can awarenesses be intrinsically valid as known, for they are not self-luminous. They do not have anything in themselves to reveal themselves as true.

(E457-458) Awareness has the nature of illuminating its object. Rucidatta remarks that awareness illuminates its object's own nature, while desire, dislike, etc. depend on awareness for their object. Rāmakṛṣṇa does not agree with Rucidatta. He maintains that the object of an awareness is readily illumined as are the objects of desire, volition, etc. that are illuminated in the concomitant awarenesses.

(E601-602) After noting the views of Upādhyaya (=Yajñapati), Jayadeva, Narahari Miśra [?] and others on the definition of perception that Gaṅgeśa gives--perception is awareness which does not have an awareness as its efficient cause--and also discussing the intricate criticisms offered by the above-mentioned scholars, Rāmakṛṣṇa asks whether this applies to yogic perception too. He answers that it does, as also to

hearing, considering and meditating (as in *Bṛhadāraṇyaka Upaniṣad* 2.3.5). Reality is not directly apprehended in the first two of these--hearing and considering; the first should lead to the second, which in its turn will lead to the third, and that leads to the perception of God. Furthermore, the definition applies to awarenesses of absences too.

(E619) In the case of apprehending an object having parts, the nature of the relation need not be *saṃyuktasamavāya*; it may just be contact (*saṃyoga*). Rāmakṛṣṇa notes the interpretation of Jayadeva and the criticism of it by Rucidatta. He offers his own interpretation. A cause should be specific to a specific effect; otherwise, an effect could come into existence accidentally. This principle, though, does not apply to the production of the perceptual awareness of the self. The general contact between the self and internal organ is not the cause of a substance. Except in the case of sound, *saṃyuktasamavāya* as well as contact can be the determining cause.

(E631-636) Regarding the contact leading to the perception of sound, the text speaks of sound as non-locus-pervading; that is why a sound is not heard everywhere. The region of *ākāśa* which is the locus of sound through inherence and which is determined by the contact with the ear is the place where sound is heard; when there is no such contact, sound is not heard. Thus all sounds are not heard everywhere. Rucidatta notes that some scholars observe that inherence as such is a "contact". Even though it exists sound is no heard in the auditory cavity, because its object is not there. Rucidatta questions this interpretation. Inherence need not be brought in here. Rāmakṛṣṇa offers his own view. The contact between the object and external light assists in production of ocular perception. Similarly, contact with the ear helps in the perceptual awareness of sound. Contact has no part to play here and does not determine what produces the awareness.

(E690) While commenting on the problem of perceiving absences, Rāmakṛṣṇa notes the views of Yajñapati and Jayadeva, and offers his own view. Not every absence can be the cause of an awareness of absence. An absence of awareness of the relevant counterpositive is the cause of the awareness of absence. If a post were to possess the universal ghost-ness it can be apprehended as having ghost-ness as its qualifier. Similarly, if air were to have manifested color then it may be perceived to have it. So, if a counterpositive can be proved in a general way

through perception, then failure to apprehend it helps apprehend the absence.

(E696-697) Regarding self-linking connector Rāmakṛṣṇa notes that it must be admitted in all cases. If it is not admitted, then substratum-ness and superstratum-ness cannot be proved, as everything must be either a substratum or superstratum. Thus denying this relation leads to difficulty, and there is no harm in admitting it. So it can be admitted in every case. There is also no harm in admitting inherence, but not in every case--e.g., [not] in the case of relations involving absences.

(E755) A locus of an absence has two aspects: its locus-ness and its absence-ness. It is a locus which different from that which has the locus of the counterpositive. It is the thing to be proved by the counterpositive, and so is required in the case of a perception that has it as its relatum. So when the counterpositive is an awareness, that is, when a person thinks of seeing an object, the locus where it used to rest, or the awareness of that locus, is cognized as not present there. Thus the locus, though it does not have the counterpositive, is treated as having it in some other way. That is, the ground does not then have anything on it but is treated as having an absence there.

(E738-739) A self-linking connector is a relation which is capable of giving rise to a construction-filled awareness without depending upon any other relation. Rāmakṛṣṇa makes the following observations on this. The nature of the absence is itself the relation. For example, the absolute absence of, say, a jar, on the ground is self-linked to the jar. Since contact is not necessarily locus-pervading, the jar's being on the ground is not necessarily locus-pervading. So the absolute absence of the jar may exist in a place along with the jar, but have relevance only with reference to its presence in relation to its counterpositive. The other kinds of absence, namely mutual, prior and posterior, have only self-linking connectors. Erroneous awareness will arise only when there is the awareness of mutual absence (i.e., difference) with reference to the counterpositive, and also in the case of prior and posterior absence in regions except those occupied by the inherence-causes of their counterpositives. Self-connection can be defined as a relation which is other than contact and inherence, and which has for its object an construction-free awareness.

(E772) The text does not admit contact between the eye and external light as the cause for the rise of perception. Rāmakṛṣṇa feels that both the contact between the eye and light and that between the object and the light are essential for the rise of perceptual knowledge.

60.241. RĀMAKṚṢṆĀDHVARĪNDRA, *Nyāyacūḍāmaṇi*

A manuscript exists of this work in Madras.

61.BHAVADEVA (1650)

If NCat is right in ascribing a commentary on Bhavānanda to this writer he must have lived after Bhavānanda. A Bhavadeva is said to have had Umāpati Upādhyāya (who lived around 1675) as a pupil (Cf. DM p. 49). If these identifications are correct we may date Bhavadeva around 1650.

61.242. BHAVADEVA, *Anumānaprakaraṇavyākhyā*

Manuscript references at NCat I, 210.

61.243. BHAVADEVA, Commentary on Bhavānanda's *Kārakacakra*

NCat III, 373 locates a manuscript reference.

61.244. BHAVADEVA, *Ṭīkā* on the *Vyāptipañcaka* section of Gaṅgeśa's *Tattvacintāmaṇi*

A manuscript of this work is said to exist in a private collection in Varanasi.

61.245. BHAVADEVA, *Vaiśeṣikaratnamālā*

A manuscript of this work is said to exist in a private collection in Varanasi.

62.GOPINĀTHA MAUNIN (1650)

Gopinātha was the son of a Gosvāmi Bhaṭṭa and was patronized by a King Jayasiṃha during the 17th century. He lived in Varanasi, and his father's name was Jñānapati (according to DM, p. 243; UM, p. 473, and NCat 6, 165 and 11, 113). Satiscandra Vidyabhusana (HIL p. 485) finds a passage in which Gopinātha terms himself "Lord of the Lily of Logic".

62.246. GOPINĀTHA MAUNIN, *Śabdālokarahasya*

Mentioned in DM, p. 243.

62.247. GOPINĀTHA MAUNIN, *Prakāśa* on Keśava Miśra's *Tarkabhāṣā*

Mentioned in DM, p. 243.

62.248. GOPINĀTHA MAUNIN, *Vilāsa* on Udayana's *Nyāyakusumāñjali*

See NCat VI, 165 for manuscript locations.

63. MATHURĀNĀTHA TARKAVĀGĪŚĀ (1650)

Daniel H. H. Ingalls (Ingalls pp. 20-27) gives a wealth of information on this author, one of the great sub-commentators on Gaṅgeśa's *magnum opus*. Ingalls establishes that Mathurānātha was the son of Rāma Tarkālaṃkāra, who was the pupil of that Rāmabhadra Sārvabhauma who also taught Jagadīśa. The earliest manuscript of one of his works dates from 1652.

Several writers take special note of Mathurānātha's style. Ingalls writes: "His great virtue is verbal clarity. No matter how complex the subject, Mathura cuts it up and arranges it in such a way that it appears understandable. For all his protestations of brevity, he never spares a word or paragraph if he feels that his meaning is not wholly clear....This virtue is counterbalanced by an annoying pedantry. Mathura will worry an argument to death after he has proved his point. In analyzing definitions he will spend as much time on a poor one as on a good one." (Ingalls pp. 24-25)

63.249. MATHURĀNĀTHA TARKAVĀGĪŚA, *Vivṛti* or *Rahasya* on Raghunātha Śiromaṇi's *Ākhyātavāda*

The work has been published in the edition of the *Ākhyātavāda* by M. G. Bakre with five commentaries published from Bombay in 1931 (cf. EnInPh, Bibliography #948.1.1).

63.250. MATHURĀNĀTHA TARKAVĀGĪŚA, *Rahasya* or *Vivṛti* on Udayana's *Ātmatattvaviveka* or *Bauddhadhikkāra*

The work has been edited several times. "E" references are to the incomplete edition by V. P. Dvivedin and L. S. Dravid in Bibliotheca Indica 170, 1907-1939.

Summary by V. Varadachari

(E18.30) The benedictory stanza depicts Kṛṣṇa playing upon his flute. The name of Udayana's text is given as

"*Bauddhādhikara*". The word "*nija*" in the introductory stanza is explained as meaning that which is not to be purchased by authority or some other means; this is also found in Raghunātha's and Bhagīratha's commentaries.

(E20-22) While denying the existence of the self, the Buddhists put forward four arguments based on momentariness, the non-existence of external objects, the non-difference of objects from their (supposed) qualities, and the failure to experience a self. Mathurānātha explains how each one of these views would lead to an undesirable conclusion about the Nyāya self. They would prove respectively that the self is non-eternal, is not the locus of awareness, that it does not have qualities such as satisfaction and frustration, and that it is not different from the body, etc.

E27-29) Mathurānātha's exposition of momentariness is lengthy. He gives a marvelous description of momentariness. An object is momentary when it does not exist at a particular moment having existed in the previous moment. It does not exist at the moment marked by the prior absence, and that moment is not the one when it exists. The author discusses in detail the purposes served by each word in this definition. Then the nature of the deluge (*pralaya*), when objects cease to exist, is discussed in terms of this definition. The word "*kṣaṇa*" is defined as vibration or motion and in this sense by "moment" is meant action, which continues to remain for two or three moments.

An alternative definition of momentariness is offered and explained. Some scholars state that the case of the jar which the Buddhist analysis of inference contains for illustration is meant to play the role of *vipakṣa*. Mathurānātha declares that this is not admitted by any system of thought.

63.251. MATHURĀNĀTHA TARKAVĀGĪŚA, *Ātmatvajātivicāra*

NCat II, 48 cites manuscript locations.

63.252. MATHURĀNĀTHA TARKAVĀGĪŚA, *Rahasya* on Raghunātha Śiromaṇi's *Kiraṇāvalīprakāśadīdhiti*

Manuscripts of this work are cited in various places.

63.253. MATHURĀNĀTHA TARKAVĀGĪŚA, *Rahasya* on Vardhamāna's *Kiraṇāvalīprakāśa*

See NCat IV, 155 for manuscript citation(s). Thakur,

ODVS,p. 297, says the commentary on the *dravya* section is "very rare" but that the section on *guṇa* is "easily available. From this portion, it is supposed that the size of the commentary was very large."

63.254. MATHURĀNĀTHA TARKAVĀGĪŚA, *Rahasya* on Udayana's *Kiraṇāvalī*

Portions of the *dravya* section of this are edited by Gaurinath Sastri in MM. Sivakumara Sastri Granthamala 4, Varanasi 1981. Thakur, ODVS p. 296 comments on the difficulty of collecting various pieces of it from manuscripts in many locations.

63.255. MATHURĀNĀTHA TARKAVĀGĪŚA, *Vyākhyā* on Raghunātha Śiromaṇi's *Nañvāda*

NCat IX, 323 cites SSPC. III, K. 82, and Stein 147 for manuscript locations, as well as CSCR 36, pp. 207-208.

63.256. MATHURĀNĀTHA TARKAVĀGĪŚA, *Rahasya* or *Phakkikā* on Vallabha's *Nyāyalīlāvatī*

Manuscript citations are provided at NCat X, 262; I, 25. See also CSCR 36, pp. 206-208, 214-217 for citations of Calcutta manuscripts. Thakur (ODVS p. 321) says 'Many fragmentary portions of the commentary are available in different repositories. The commentary must have been a voluminous one."

63.257. MATHURĀNĀTHA TARKAVĀGĪŚA, *Rahasya* on Raghunātha Śiromaṇi's *Nyāyalīlāvatīprakāśadīdhiti*

Mss. available at Santipura and Navadvipa.

63.258. MATHURĀNĀTHA TARKAVĀGĪŚA, *Rahasya* on Vardhamāna's *Nyāyalīlāvatīprakāśa*

Cf. IOL 5872 for ms. citation.

63.259. MATHURĀNĀTHA TARKAVĀGĪŚA, *Rahasya* on Gaṅgeśa's *Tattvacintāmaṇi*

Most of this work is available in Bibliotheca India 98, 1884-1901; Delhi 1974; New Delhi 1989; Varanasi 1990, edited by Kamakhya Nath Tarkavagisa. Unless otherwise indicated, the "E" references in the summaries below are to this edition.

63.259.1. I. *(Pratyakṣa)*

Edited in M. M. Sivakumarasastri-Granthamala 2, Varanasi 1976.

63.259.2. II. *(Anumāna)*

66.259.2.1.*Anumiti*

Edited. See Bibliography under Gaṅgeśa and Mathurānātha.

63.259.2.2.*Vyāptipañcaka*

This section is edited and translated by Daniel H. H. Ingalls (Ingalls pp. 87-153). Our summary is made based on this material; "ET" references are to it. The summary should be read in close connection to the summary of Gaṅgeśa's *Vyāptipañcaka* in EnInPh Volume Seven, p. 171 and of Raghunātha's *Dīdhiti* thereon, pp. 549-550.

(ET87-90) The pervasion in question, discussed in this section, is that which is the cause of the inference's bringing about the inferential result. (There is some explanation of the grammar of "pervasion".)

(ET90-112) D1: Non-deviation is the non-occurrence of the *hetu* in a locus of the absence of the *sādhya* (*sādhyābhāvavadavṛttitvam*).

Two analyses, by the "old school", of the Sanskrit compound in the preceding line are criticized in grammatical terms. "Non-occurrence of the *hetu* in a locus of the absence of the *sādhya*" actually means possessing no occurrence of the *hetu* in the absence of the *sādhya*.

Now various objections are considered and met. "Non-occurrence" more precisely means absence of occurrence-ness. There are various kinds of absence; here, it is generic absence (*sāmānyābhāva*) that is intended. The relation that is being denied needs to be specified; it is contact (i.e., "absence of occurrence-ness" means the absence of the smoke being in contact with (say) a lake).

Objection: But a valid inference (such as "it possesses quality-ness because it possesses awareness-ness") will become false under this definition, since the absence of a quality may be the content of an awareness. And if you say that you mean that the locus of the absence of the *sādhya* stands in the absential-qualification relation (*abhāvīyaviśeṣanatāviśeṣasambandha*), the definition will fail to cover a valid inference such as "it has

mutual absence of pot because it is a cloth".

Answer: No, since absence is a different category and thus never identical with a presence (i.e., an absence of an absence is not a presence of one of the first six Vaiśeṣika categories). Or if you think that such an absence may be identical with a presence, then the type of absence in question can be limited in an appropriate way to avoid the ambiguity. Several types of cases are analyzed, involving extensive exploration of kinds of absences of absences and distinguishing among them by imposing various sorts of restrictions on the applicability of technical terms such as "counterpositive-ness", etc., as well as insertions to overcome difficulties arising from vagueness about certain kinds of terms. The eventual outcome of all these insertions comes in the following definition:

MD1: Pervasion (i.e., non-deviation) is the possession (by the *hetu*) of those properties which together with the limiting relation of *hetu*-ness limit a generic locus-ness such as has no manifestation in a locus of that unlimited locus-ness whose (limiting) relation is either (absential) particular relation or a relation which limits the counterpositive-ness limited by the limiting relation of the *sādhya*-ness and which is described by (an entity) qualified by the absenceness of the *sādhya*. The section closes with the presentation of two alternative versions of D1 attributed to "some people". The second of these allows Gaṅgeśa's definition to apply to cases where the *sādhya* is of incomplete occurrence. It is not clear whether Mathurānātha accepts these or not.

(E126-133) D2: Non-deviation is the non-occurrence of the *hetu* in a locus of an absence of the *sādhya* which is different from a locus of the *sādhya*.

There is a problem about interpreting "which is different from a locus of the *sādhya*". The old school explains it in a way which makes its sense identical with that of D5 below. The new school reparses the Sanskrit compound and assumes that there are different absences for each different locus. Mathurānātha qualifies this so that only two types of absences are split in this way, namely (1) an absence occurring in the same locus as its counterpositive and (2) an absence limited by a property whose loci are different from its counterpositive.

(E134-136) D3: Non-deviation is the *hetu*'s not having the same locus as a mutual absence whose counterpositive is a locus of the *sādhya*.

But the valid statement "the mountain has fire because it has smoke" fails D3, since there is something (say, a hearth) which does have the same locus as a mutual absence of a locus of the *sādhya* (fire) where the locus of fire is the mountain.

(E137-148) D4: Non-deviation is the *hetu*'s being the counterpositive of an absence which resides in all loci of absence of the *sādhya*.

There is the possibility of construing the Sanskrit compound (which D4 translates) in different ways. Various insertions are proposed to disambiguate D4.

(E148-150) D5:Non-deviation is the *hetu*'s non-occurrence in what is other than the locus of the *sādhya*.

(E151-153) All five of D1-5 fail where the *sādhya* is only-positive.

63.259.2.3. Siṃhvyāghra

"ET" references are to the edition and translation contained in the articles by Toshihiro Wada, "Gaṅgeśa and Mathurānātha on Siṃhavyāghralakṣaṇa of *Vyāpti*", (1) Journal of Indian Philosophy 23, 1995, 273-294; (2) Journal of Indian Philosophy 25, 1997, pp. 375-391; (3) Journal of Indian Philosophy 26, 1998, p. 131-159; (4) Nagoya Studies in Indian Culture and Buddhism: Saṃbhāṣā 19, 1998, pp. 1-21; (5) Journal of Indian Philosophy 27, 1999, pp. 397-409; (6) Journal of Indian Philosophy 28, 2000, pp. 77-98. The summary is found in (6), the last of these articles, on pp. 77-80.

Summary by Toshihiro Wada

(ET1.283) According to D6 (of Gaṅgeśa's work as summarized in EnInPh Volume 6) pervasion is the *hetu*'s not being a locus of the property not-having-a-common-locus-with-the-*sādhya*. (This is the Lion definition.) But D6 over-extends to include "this is a substance, because it possesses the highest universal (*sattā*)", which is false, since e.g. a quality possesses the highest universal.

D7 (The Tiger definition) is equivalent to D2 above, and suffers from the same difficulties.

1 (ET1.283 Mathurānātha begins to clarify "the property of having no common locus with a *sādhya*" in the Lion definition either as an absence of the occurrence in the locus of a *sādhya* or as the occurrence in what is different from the locus of a *sādhya*. He rejects both definitions.

(ET1.285) However, if we read "the *hetu*'s not-having-a-

common-locus-with-the-*sādhya*" to mean the *hetu*'s not being the locus of the occurrence in the locus of an absence of the state of being the locus of the *sādhya*, the improved D6 (call it D6a) will now apply to "the tree possesses monkey-contact because it is this tree", involving a non-locus-pervading *sādhya*.

2 (ET1.285-287) Mathurānātha arrives at a revised version of the Lion definition: the state (possessed by a *hetu*) of being different from an occurrent in the locus of an absence of the property of being the locus of the *sādhya*.

3 (ET1.287-290) The purpose of the expression "the property of being a locus" in the definition arrived at in 2 is clarified.

4 (ET2.376-380) The *sādhya* should be qualified by the limiter of *sādhya*-ness, and the *sādhya* should exist in its locus through the limiting relation of *sādhya*-ness.

5 (ET2.380-385) Two reasons are provided why the two conditions given in the previous section can remove the defect of under-extension.

6 (E2.385-389) The occurrence (of the occurrent referred to in the definition) should be limited by the limiting relation of the *hetu*-ness.

7 (ET3.132-134) Someone may object that the occurrence limited by the limiting relation of the *hetu*-ness is not real, in which case the definition will suffer from the defect of under-extension.

8 (ET3.135-137) To remove the above defect, the definition should be rewritten as "the state of being the limiter of counterpositive-ness to a mutual absence, which is the pervader of an absence of the property of being a locus of the *sādhya*, and so on."

9 (ET3.138-142) The purpose of the word "pervader" used in the definition is clarified.

10 (ET3.142-150) The state of being the limiter of the counterpositive-ness should be limited by the limiting relation of *hetu*-ness and the limiter of *hetu*-ness.

11 (ET3. 151-156) To preserve the validity of the definition, a mutual absence of the possessor of an incomplete occurrent should be interpreted as a complete occurrent.

12 (ET4.3-7) Mathurānātha begins his discussion of the Tiger definition. He clarifies "the property of having a locus different from that of a *sādhya*" in the definition as the occurrence in what is different from the locus of a *sādhya*.

13 (ET4.7-10) A mutual absence of the possessor of an incomplete occurrent should not be regarded as an incomplete occurrent, as in the case of the Lion definition.

14 (ET4.10-12) The difference between the Tiger definition (incorporating the clarification given in 12 above) and D5 of the *Vyāptipañcaka* is that the former includes "the state of being a locus" (locus-ness) in its final part.

15 (ET4.12-20) "The state of being different from the locus of a *sādhya*" in the definition should be understood as a difference describing (*nirūpaka*) the state of being the limiter of the counterpositiveness limited by the limiting relation of the *sādhya*-ness. And that state should reside in that which is qualified by the limiter of the *sādhya*-ness.

16 (ET5. 399-401) The final form of the Tiger definition will be "the state of being the limiter of the counterpositive-ness to a mutual absence", which is the pervader of the difference referred to in text 15.

17 (ET5.401-408) The purpose of the change provided in 16 is clarified; it is the same as that stated in 7.

18 (ET6.80-82) Mathurānātha interprets the definition said by Gaṅgeśa to be equivalent to the Lion and Tiger definitions as that pervaded by them, i.e. as a stricter definition, and provides their pervader, i.e. a looser definition.

19 (ET6.82-84) Mathurānātha assets that even their looser definition fails to apply in the case of an inference whose *sādhya* is unnegatable.

20 (ET6.84-88) The difference referred to in the looser definition should be understood as a generic difference. Otherwise, the looser definition will not succeed in applying to a well-known case.

21 (ET6.88-89) Since the pervader of the definitions by Lion and Tiger fails to apply in the two cases, those two definitions are not satisfactory.

22 (ET6.89-90) Mathurānātha introduces the views of the followers of Teacher (*bhaṭṭācārya*)[1] who argue that the definition said by Gaṅgeśa to be equivalent to those definitions means either "an absence of occurrence in the possessor of a generic absence of the property of being the locus of a *sādhya*"

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[1]Wada informs us in a footnote that Gopinath Kaviraj (*Gleanings from the History and Bibliography of the Nyāya-Vaiśeṣika Literature*, Calcutta 1961, p. 60) "mentions that Mathurānātha calls Raghunātha Śiromaṇi *bhaṭṭācārya* in his text."

or "an absence of occurrence in that which is different from all the possessors of a *sādhya*. Their view continues through 24.

23 (ET6.90-91) The followers assert that the definition incorporating either clarification provided in 22 fails to apply in the case of an unnegatable *sādhya*.

24 (ET6.91-96) The followers anticipate an objection: It is still possible to improve by two clarifications the definitions said by Gaṅgeśa to be equivalent to the two definitions, so that it can apply in the case of an unnegatable *sādhya*. But the followers interpret Gaṅgeśa, pointing out that the definition incorporating either clarification cannot remove the defect of under-extension in a well-known valid case.

63.259.2.4. Vyadhikaraṇāvachinnābhāva

Summary by Madhusudana Nyayacharya

This section attempts to examine the Mīmāṃsā school of Sondāḍa according to which the counterpositive-ness of an absence can be limited by a property which does not occur in the counterpositive. Gaṅgeśa has found fault with the first five definitions of pervasion because they fail to apply to only-positive *sādhyas*. For one thing, D1 does not apply to a pervasion where the *sādhya* is unnegatable because there can be no locus of absence of the *sādhya*. For example, the relation between nameability and knowability is pervasion; wherever there is knowability there is nameability, or whatever is knowable is nameable. Yet the first definition of pervasion cannot apply to this relation because according to Nyāya everything is nameable, i.e., there is no locus of the absence of nameability.

The followers of Sondāḍa try to save this definition by removing this defect (of being too narrow) by holding that there is a way of getting a locus of absence of entities which are only-positive. An entity is only-positive if its absence is not available. The method of Sondāḍa can be explained in the following way.

Each absence has a counterpositive, and the counterpositive-ness occurring in this counterpositive is necessarily limited by some property or another and by some relation or another. Thus in the absence of jar the counterpositive is jar and the counterpositive-ness occurring in this jar is limited by jar-ness, provided that by absence of jar we mean the absence of every jar. This counterpositive-ness is limited by relation of contact. Now in the absence of nameableness, nameableness is the counterpositive, the counterpositive-ness is limited by nameable-ness and the self-linking connector. This absence of nameable-ness is not found anywhere, but Sondāḍa asserts that the limiter of the counterpositive-ness need not be a property occurring in the counterpositive. Thus we can have the absence of a cloth as a jar, which is an absence the counterpositive of which is the cloth, but the limiter of the counterpositive-ness is jar-ness--which does not occur in the cloth, the counterpositive. Sondāḍa claims that we can genuinely know that there is no cloth as a jar on the ground and hence the counterpositive-ness of an absence can be limited by a property not occurring in the counterpositive. (Let us call this a heterogeneous absence for convenient reference.)

If we accept a heterogeneous absence then we can show that D1, for example, is not too narrow. We can now say that the absence of nameable-ness occurs even in a jar, for although the jar is nameable and hence the absence of nameable-ness does not occur in the jar, yet it is an absence the counterpositive-ness of which is limited by a self-linking connector. But if we admit an absence of nameable-ness the counterpositive-ness of which is limited by the inherence relation then the absence will occur everywhere. The reason is that nameable-ness does *not* occur anywhere in the relation of inherence; hence the *absence* of nameable-ness in this relation occurs everywhere. In this way absence of only-positive entities is possible and hence D1, for example, ceases to be too narrow. This type of absence occurs where the counterpositive does not occur as well as in the locus of the counterpositive. Usually an absence and its counterpositive cannot co-exist in the same locus; the one excludes the other. But the opposition is really not between the counterpositive and the absence but between the counterpositive as qualified by the limiter of the counterpositive-ness and the absence. This kind of absence (a heterogeneous absence) occurs everywhere because its counterpositive as qualified by the limiter of the counterpositive-ness is not available at all.

Then Mathurānātha examines the nature of nameable-ness. There are two theories of the nature of nameable-ness. A name applies to whatever is named by it because of a convention of the form "let the word W mean the object O."

This convention is really not a human convention but the will of God. So the will of God is what makes a name applicable to the entities named by it. Hence nameable-ness is identical with God's will. But if nameable-ness is God's will it inheres in God. So the absence of nameable-ness in the relation of inherence is not a heterogeneous absence and is thus occurrent everywhere. Hence if nameable-ness is the *sādhya* of an inference then a locus of the absence of the *sādhya* will always be available.

Against this theory of Sondāḍa's it may be pointed out that although it makes an absence of only-positive entities possible yet it cannot save the definition of pervasion as the non-occurrence of the *hetu* in a locus of absence of the *sādhya*. For the absence of the *sādhya* must be taken to mean an absence of the *sādhya* the counterpositive-ness of which is limited by the limiter and the limiting relation of the *sādhya*-ness. Otherwise the definition will not apply even to cases like the relation between smoke and fire. For we can argue that the mountain is a locus of the absence of fire in the sense that fire does not occur in the hill in the relation of inherence or that the fire and a jar both do not occur in the hill. To avoid this defect we have to say that the limiting relation of the *sādhya*-ness in this inference "the mountain has fire..." is the relation of contact and the limiter of the *sādhya*-ness is fire-ness. Hence even if the mountain where the *hetu* (smoke) occurs be a locus of the absence of heath-fire and a jar it does not affect the definition of pervasion. Now if this be the meaning of "absence of the *sādhya*" in D1, etc., then we cannot say that in the inference "this is nameable because it is knowable" we can have a locus of absence of the *sādhya* (nameable-ness), because nameable-ness as inherent is absent everywhere. For where nameable-ness is the *sādhya* the limiter of the *sādhya*-ness is nameable-ness-ness and the limiting relation of the *sādhya*-ness is self-linking connector, not the relation of inherence. Hence it does not help even if we say that nameable-ness as an inherent property is absent everywhere, for this absence cannot be regarded as the absence of the *sādhya*.

In reply to this objection it may be said in support of Sondāḍa that the absence of the *sādhya* in the definition of pervasion does not mean an absence the counterpositive-ness of which is limited by the limiter and the limiting relation of the *sādhya*-ness. It rather means the absence which is the locus of the absence of entities (1) the co-presence of the *sādhya* limited by the limiter and the limiting relation of the *sādhya*-ness and

(2) difference from the particular absences the counterpositive-ness of which is limited by a heterogeneous absence.

In simple language this means that in ordinary cases we shall have an absence the counterpositive-ness of which is limited by the limiter and the limiting relation of the *sādhya*-ness. Thus in the case of the relation between smoke and fire we have an absence, say the absence of fire as fire, which is the absence of the co-presence of the fire limited by fire-ness and contact, and hence this absence is the locus of the absence of both (1) and (2), because it is the locus of the absence of (1). In this case, we can also have an absence, say the absence of fire as pot (a heterogeneous absence) which is *not* different from heterogeneous absence; hence this absence is the locus of absence of (2), and hence is the locus of absence of both (1) and (2). In the case of only-positive *sādhyas* the first type of absence is not available. The followers of Sondāḍa point out that in such cases we always have an absence of the second type, i.e., an absence which is a locus of absence of (2), hence a locus of absence of both (1) and (2). (The reason is that in that case, if there is absence of one entity anywhere, then there is always the absence of both that entity and anything else. Thus if there is absence of jar in a room, we can always know there is the absence of both jar and cloth, whether the cloth is or is not in the room.)

Now pervasion is non-deviation. But what is deviation now that heterogeneous absences have been admitted? The definition of deviation is as follows: deviation is the absence describing the counterpositive-ness limited by heterogeneous absence. But if we accept this as definition of deviation then knowability becomes a deviating *hetu* of nameable-ness, i.e., the definition of deviation becomes too wide. This can be explained as follows. Knowability is the *hetu* here; the property of nameable-ness-ness is a heterogeneous absential property of knowability, for nameable-ness-ness belongs to only nameable-ness, not to knowability. Now if we have an absence the counterpositive-ness of which is limited by nameable-ness-ness and the relation of self-linking connector, then this absence occurring in knowability is an absence the counterpositive-ness of which is limited by the limiter of the *sādhya*-ness (the *sādhya* here is nameable-ness; the limiter of the *sādhya*-ness is nameable-ness-ness) and by the limiting relation of self-linking connector which is the limiting relation of the *sādhya*-ness. Thus this absence being a heterogeneous absence occurs

everywhere and hence in the pot too. But then knowability is present in the pot which is a locus of the absence of the *sādhya* knowability. Thus knowability becomes a deviating *hetu* of nameable-ness--i.e., the definition of pervasion becomes too wide.

To avoid this difficulty it has to be asserted that the absence involved in the definition of deviation should be the absence of the *sādhya* qualified by the limiter of the *sādhya*-ness. Now knowability no longer deviates from nameable-ness, for the counterpositive-ness (of the absence occurring in knowability as described above) is not an absence the counterpositive of which (as qualified by the limiter of the counterpositive-ness--the absence of knowability as nameable-ness) is not the *sādhya* but knowability. As the counterpositive of the absence is not the *sādhya*, this presence of the *hetu* (knowability) in a locus of this absence will not make the *hetu* a deviating one.

Thus the definition of pervasion--as the non-occurrence of the *hetu* in a locus of absence of the *sādhya*--can apply to cases with an unnegatable *sādhya* if heterogeneous absences are admitted. But Gaṅgeśa has already rejected this definition as being too narrow, for according to him it cannot apply to cases with unnegatable *sādhyas*. Hence it follows that Gaṅgeśa has to reject heterogeneous absence. We state here the arguments for and against this type of negation as given by Gaṅgeśa and explained by Mathurānātha.

We first note that Nyāya analyses the awareness of absences and independently existing absences. This is because here Nyāya is not concerned with ontological questions but with inference (which is a form of awareness) and its conditions. Now in developing a logic of awareness ordinary identity cannot be used to preserve truth. Even if it be true that $a = b$, even then if a person knows a he may not know b. In analyzing knowledge and truth it is not sufficient to deal with ontological entities and their relations such as identity. It is also necessary to take into account *how* the objects themselves are known. It is a fact that one and the same thing may be known in different ways; for example, a jar may be known as a jar, as a thing, as something possessing a particular color, and so on. Ontologically here there is only one entity--namely, a jar. But a jar possesses almost an infinite number of properties and it can be known truly as possessing *any one* of these properties. Thus although the object is ontologically the same yet its cognitions are different--the awareness that it is a jar is utterly different from the awareness that it is a thing. The fundamental concept of a logic of awareness is how a thing is known rather than its ontological identity. The concept of limiter is necessary to explain how a thing is known. Thus when we know that Socrates taught Plato, we know something as Socrates and also that he taught Plato. This awareness is completely different from the judgment that the Athenian philosopher who drank hemlock taught Plato, although Socrates = the Athenian philosopher who drank hemlock. According to Nyāya this difference is explained by saying that the limiter of the subject-hood in the first judgment is the property of being Socrates while in the second judgment the limiter of the subjecthood is the property of being the Athenian philosopher who drank hemlock. This difference cannot be explained by saying that the subject in the first judgment is Socrates while the subject in the second judgment is the Athenian philosopher who drank hemlock, for as we have already seen Socrates is the Athenian philosopher who drank hemlock, so the subjects are one and the same thing. To explain the difference between these two judgments we have to say that one and the same thing has been known in two different ways. This is what the Nyāya means by saying that the limiter of the subject-hood in one judgment is different from that in the other. Thus the basic concept of any logic which tries to deal with awareness but not with entities like propositions and their relations will have to make use of the concept of a limiter.

According to Nyāya the usual type of awareness which can be expressed in words and is important for practical purposes is relational awareness--i.e., the awareness of complex objects of the form *aRb*. In this type of awareness there are three factors in the complex object, a relation and its two terms. The adjunct of the relation is the qualificand and the subjunct of the relation is the qualifier. In awareness of *aRb a* is the qualificandum, *b* the qualifier and *R* the relation. Even the so-called subject-predicate judgment is relational awareness, for even in these judgments we know a relation (usually of possession) between the subject and the predicate. Thus in the awareness "Socrates is wise" we know that Socrates possesses wisdom, i.e. we know the relation of possession, its adjunct Socrates and its subjunct wisdom. Whether in the *proposition* 'Socrates is wise' there is any relational element over and above the subject and the predicate may be debatable. But there is no

doubt that in the *awareness* a relation is known. Thus Nyāya seems to agree with Bradley that all judgment is relational.

When we know *aRb*, *a* and *b* are first known *as something*; then we know their relation *R*. This *R* is known as the limiting relation of the qualifier-ness. When we know that Daśaratha is the father of Rāma, the relation known is being-the-father-of, the qualificand is Daśaratha, and the qualifier is Rāma. The limiter of the qualificand-ness is the property of being Daśaratha, the limiter of the qualifier-ness is the property of being Rāma, and the limiting relation of the qualifier-ness is being the father of. That is, according to Nyāya the awareness that Daśaratha is the father of Rāma is to be analyzed in the following way: (i) Something is known as Daśaratha, i.e., as possessing the property of being Daśaratha, (ii) Something is known as Rāma, i.e., as possessing the property of being Rāma, (iii) and the first is known as related to the second by the relation of being the father of. Here the first term of the relation is the qualificand; the property which it is known to have in being that qualificand is the limiter of qualificand-ness; the property by virtue of which the qualifier becomes the qualifier in the awareness is the limiter of the qualifier-ness; and the relation which being known determines the qualificand and the qualifier of the awareness is the limiting relation of the qualifier-ness.

This relational awareness passes through various stages of complexity. At the simplest stage the awareness is expressed in and through a single word, for example, "jar". The awareness which this single word represents is relational awareness--anything possessing the property of jar-ness. In this simplest form the qualificand is not known as possessing any further property. The next stage in the development of relational awareness is represented by the sentence "this is a jar". In this awareness that which is known as possessing jar-ness is also known as the this. In "man is mortal" we have a more complicated form of relational awareness. Anything possessing humanity is also known as possessing mortality. Here we know the qualificand not merely through the qualifier but also through some other determination. In symbols we may represent this sentence as "(x)(Hx>Mx)." In sentences of this type we have an awareness where "h" denotes the limiter of the qualificand-ness and "M" the limiter of the qualifier-ness.

There is another type of relational awareness where we know several entities; for example we may cognize "these are jar and cloth". In this type of awareness there are two qualificands and there are two corresponding qualifiers. In "this is both red and round" we have one qualificand but two qualifiers. In "this and that are red" we have two qualificands and one qualifier.

Now the problem arises how to distinguish relational awareness from conjunctive awareness. In an awareness of the form *aRb* we may say that we have known the three elements *a*, *R* and *b*. But this latter form of expression does not represent a relational awareness at all but only conjunctive awareness. We can say that when we have the awareness of the form "*aRb*" we know not merely *a*, *b* and *R* but also the relation between *a* and *R* (the relation of being the first member of *R*) and the relation between *b* and *R* (the relation of being the second member of *R*). But this reply does not help because then we might say that an awareness of the form "*aRb*" is really a conjunctive awareness of the form "*a*, *b*, *R*, *R*', *R*" (where "*R*'" and "*R*''" represent the relations between *a* and *R* and between *b* and *R* respectively).

There may be another way of distinguishing between relational awareness and conjunctive awareness. It may be said that when we have an awareness of the form "*aRb*" then the relation *R* is known by itself and not as possessing any further property. But in that conjunctive awareness--of the form "*a*, *b* and *R*"--*R* is known as possessing a further property which is its qualifier. This answer also is not satisfactory because it fails to distinguish between an awareness of the form "*aRb* and *R*" and of the form "*a*, *b* and *R*", for in both the cases we have an awareness of *a*, *b*, and *R*.

To explain the difference between a relational awareness and a conjunctive awareness it is necessary to note the different ways in which a relation can be known. There are three different ways in which a relation can be known. (i) A relation can be a term of another relation and hence can be known either as the qualificand or more generally as the qualifier. (ii) But in every relational awareness we must know a relation over and above its terms, even though one or both of these terms may themselves be relations. Now the relation which as known determines the qualificand and the qualifier of the awareness is never known as either the qualificand or the qualifier of that awareness. That is, the relation here is known as an object different from the ways in which the qualificand and the qualifier are known as objects. Ordinarily in a sentence

expressing a relational awareness there can be no word meaning that relation, but there is some word hinting at the relation. Thus in "Socrates is wise" "is" does not exactly mean the relation (namely, the relation of possession) but indicates indirectly the presence of this relation. So also in the adjective "wealthy" the suffix "-y" also indicates the relation of possession, so that "wealthy" means "(anyone) possessing wealth". In such cases the relation is always known as a relation but not as a term. (iii) There is another way of knowing a relation as a relation, when for example there is no word either denoting or even hinting at the relation. The relation is known, i.e., becomes a content of awareness, by virtue of the order of the words in a sentence. Thus in "this is a brown table" the relation between the brown color and the table is *understood*, i.e., becomes a content of awareness by the order of the words "brown" and "table". Here also a relation is known as a relation but never as a term.

Now we are in a position to distinguish between a relational awareness and a conjunctive awareness. In a relational awareness of the form "*aRb*" the relation *R* is always known as a relation and there is no word denoting this relation, but at most only usage indirectly hinting at it. In a conjunctive awareness, on the other hand, a relation is always known as a term but not as a relation. Hence the two forms of awareness are different.

The Nyāya theory of awareness of absences differs from Western theories of negation in many respects. In traditional Western logic the negative particle "not-", or its variant "non-", is attached to terms to form negative terms. Thus from the term "mortal" we form the negative term "non-mortal". In modern mathematical logic negation is usually regarded as a truth-function; the negative sign is attached to whole sentences or sentential variables. Thus from the sentence "the table is brown" we get its negation "it is not the case that the table is brown". Nyāya does not adopt any one of these concepts.

I. M. Bochenski is misled by appearances to hold that Nyāya logic is a logic of terms, not of propositions. The truth is that the Nyāya analysis of relational awarenesses is neither a logic of terms nor of propositions. The first thing to be noted here is that we are presenting the Nyāya analysis of awareness but not Nyāya ontology. In ontology Nyāya believes that negative entities, absences, are as real as positive entities. But the Nyāya analysis of the awareness of these negative entities

shows also the peculiarities of absences. Ontologically real entities are said to be of two kinds--autonomous and non-autonomous. Some entities are autonomous in the sense that they are denoted by absolute terms, for example things denoted by the terms "jar", "red", "humanity", and so on. But there are ontologically real entities which cannot be denoted by a single term, like "absence". "Absence" always means or implies negation of something. Thus there is no entity corresponding to the word "absence" alone, but there is an entity corresponding to "absence of jar". But this term too, "absence of jar", also fails to denote an absence. That is why Nyāya cannot accept a theory of negative terms. To understand an absence we must not only know the counterpositive (the thing that is absent) but also we must know two more things--the limiter of the counterpositive-ness and the limiting relation of that counterpositive-ness. This may be explained as follows.

The term "absence of jar" is incomplete and ambiguous in more than one way. The term "absence of jar" fails to indicate whether it relates to the absence of a particular jar or of jars in general, all jars. This is because the compound term "*ghaṭābhāva*" in Sanskrit cannot show the quantifier. Hence the concept of the limiter of counterpositive-ness is brought in. The function of the limiter of the counterpositive-ness is manifold. One of its functions is to indicate whether the absence is of any particular counterpositive or of all counterpositives. Thus "absence of jar" means the absence of some particular jar when the limiter of the counterpositive-ness of this absence is particularity, a (particular)-jar-ness, but "absence of jar" means the absence of all jars if the counterpositive-ness of this absence is limited by (generic)-jar-ness. The limiter of the counterpositive-ness is really the property which is the qualifier of the counterpositive when the absence of any entity is known. To cognize the absence of any entity it is first of all necessary to be aware of the entity itself. And we have already seen that one and the same entity can be and is usually cognized in various ways. Thus if a jar is known as a particular jar then the term "absence of jar" will mean the absence of that particular jar; the limiter of the counterpositive-ness will be the property which is the qualifier in the awareness of the counterpositive, that jar. If the jar is known simply as a jar, i.e., as qualified by jar-ness alone, then the term "absence of jar" will mean absence of all jars or jar in general. The limiter of the counterpositive-ness here is jar-ness, for jar-ness is the qualifier of jar when we have

known the jar.

The limiting relation of counterpositive-ness makes plain that the Nyāya theory of absence cannot be regarded as the theory of negative terms or of negative propositions. The term "absence of jar" cannot be complete even if we supplement it by stating how we have known the jar. It is also necessary to know the relation which relates the jar to its adjunct. A jar may be related to different entities by different relations. It may be related to the ground by the relation of contact, it may be related to its own halves by the relation of inherence. Now the term "absence of jar" fails to specify what absence is exactly meant here--the jar as related to the ground or the jar related to its halves.

If we understand the limiter of the counterpositive-ness in this sense then the property belonging to the counterpositive can be a limiter of the counterpositive-ness only if the counterpositive-ness and the property limiting it are co-extensive. Thus in the absence of a jar, that particular jar is the counterpositive, and the counterpositive-ness belongs to that jar; if by "absence of jar" we mean the absence of all jars then jar-ness will be exactly co-extensive with the counterpositive-ness belonging to all jars. Jar-ness also belongs to all jars. Hence jar-ness, which is co-extensive with the counterpositive-ness, can be its limiter. But the question arises whether any property not belonging to the counterpositive can be the limiter of the counterpositive-ness belonging to the counterpositive, i.e., whether there can be a counterpositive-ness limited by a contradictory property. For example, can there be an absence of jar the counterpositive-ness of which is limited by a contradictory property, say cloth-ness? The answer to this question really depends upon the question whether cloth-ness can be a qualifier of jar in any awareness of whether we can know a jar as a cloth.

Now Gaṅgeśa denies that any awareness of the form "a jar is a cloth" is true. Hence there can be no true awareness of a jar as a cloth; hence there can be no absence of jar the counterpositive-ness of which is limited by cloth-ness. That is, Gaṅgeśa denies the possibility of a heterogeneous absence. His argument seems to be that an awareness of an absence is really non-different from an awareness of the relation of a relation where both these relations are known as relations but not as terms. If we know that a jar is in contact with the floor and that a red color inheres in the jar then this awareness can be expressed in a more complicated form "a red jar is in contact with the floor". The sentence expressing this awareness will, however, not contain any word denoting the relation being-in-contact-with. This awareness is more complex than an ordinary relational awareness, for in this awareness we know the relation (contact) between the floor and a red jar, i.e., a jar which is already related to red color. This type of awareness may therefore be called "relational awareness of the second order". Now Gaṅgeśa holds that an awareness of an absence and a relational awareness of the second order are of the same type.

Gaṅgeśa's argument for rejecting any heterogeneous absence is based on his analysis of awareness of the type "a hare's horn does not exist" and "a hare's horn does not exist in a cow". The similarity between an absence of jar as a cloth and the absence of a hare's horn should be obvious. Just as a jar cannot be correctly known as a cloth so also no horn can be correctly known as belonging to a hare. The awareness of a hare's horn is as false as the awareness of a jar as a cloth. So Gaṅgeśa from now onwards concentrates on the analysis of the absence of a hare's horn. He points out that according to the Mīmāṃsakas the property belonging to a hare cannot belong to any horn (i.e., no horn can belong to a hare). The awareness that the property of belonging to a hare does not belong to any horn, i.e., that this (supposed) property of being-a-hare's-horn is a contradictory property, will present, even according to the Mīmāṃsakas, the awareness of the property as belonging to a horn. If however they admit the possibility of such an awareness then they will have to reject their own theory that no awareness can be false, for if any horn is known as belonging to a hare than that awareness cannot but be false.

The point here is that according to Gaṅgeśa the awareness of an absence is really a relational awareness of the second order. In ordinary perception of an absence of jar, for example, we have to judge that the jar possesses jar-ness and that this jar possessing jar-ness is again related to the absence. If we do not have this awareness then we cannot perceive the absence of a jar. So Gaṅgeśa accepts the law that in ordinarily perceiving an absence of any entity the awareness of the limiter of the counterpositive-ness as the qualifier and the counterpositive as the qualificand is necessary. So if we are to perceive the absence of hare's horn we shall have to know a hare as possessing a horn where the horn is the qualificand and belonging to a hare is the qualifier. But this awareness can

never be true, and as the Mīmāṃsakas do not admit the possibility of false awareness they cannot explain how there can be an ordinary perception of the absence of a hare's horn.

A possible defense by the Mīmāṃsaka has been suggested by Mathurānātha in the following way. The Mīmāṃsakas might deny the law adopted by Gaṅgeśa, saying that for the perception of an absence an awareness of the limiter of the counterpositive-ness as the qualifier and the counterpositive as the qualificand is not necessary, but hold that only two awarenesses--the awareness of counterpositive-nesss and another of the counterpositive, but not the relational awareness with the limiter of the counterpositive-ness as the qualifier and counterpositive as the qualificand, is necessary (i.e., awareness of the counterpositive possessing its counterpositive-ness is not necessary). If we adopt this rule then there is no difficulty in explaining how there can be an ordinary perception of the absence of a hare's horn. For what is necessary for such a perception is not an awareness of a horn belonging to a hare but two separate awarenesses, one of a horn and another of the property of belonging to a hare. Both these awarenesses are possible, for obviously we can cognize a hare and also that some property or the other belongs to that hare. So we have an awareness of the hare and also of the property belonging to a hare, although we do not have the unified awareness of a horn belonging to a hare.

Awareness of the absence of hare's horn may also be explained as follows. We may hold that although there is no unified awareness of the limiter of the counterpositive-ness and the counterpositive related as qualifier and qualificand, still we can have a perception of the absence of a hare's horn. For although the limiter of the counterpositive-ness, i.e., the property of belonging-to-a-hare, cannot be known as the qualifier of the counterpositive (horn), still there is no difficulty in cognizing the limiter of the counterpositive-ness as the qualifier of the absence itself. In "absence of a hare's horn", horn is directly related to absence, while the property belonging-to-a-hare is directly related to horn and not to the absence. But the Mīmāṃsaka may say that this property also is known as the qualifier of the absence, i.e., it is absence which is qualified by both horn and the property of belonging to a hare. To say that this property is a qualifier and the absence is the qualificand is to say that there is a relation between them which is known as a relation of which the property is the subjunct and the absence

the adjunct. So the problem is how to determine this relation. The Mīmāṃsā contention is that this relation is the relation of describing the counterpositive-ness limited by itself. By "itself" here we should mean the limiter of the counterpositive-ness. The limiter of the counterpositive-ness limits the counterpositive-ness described by an absence. So the relation between the absence and the limiter of the counterpositive-ness is the chain-relation--describing the counterpositive-ness limited by itself. Now there is no difficulty in explaining how an absence of a hare's horn can be directly perceived. For although the property of belonging to a hare cannot be known as a property of a horn, still there is no difficulty in knowing this property as the property of the absence.

Against this, the Naiyāyikas point out that the Mīmāṃsā theory that an absence can be perceived if we have the awareness of the limiter of the counterpositive-ness qualifying the absence (also the counterpositive itself qualifying the absence) cannot be accepted. For if we are to perceive an absence we shall have to know the relation between the counterpositive (known) as qualified by the limiter of the counterpositive-ness and the absence. This relation is the nature (*svarūpa*) of the counterpositive-ness belonging to the counterpositive as qualified by the limiter of the counterpositive-ness. But if we accept this law then we cannot explain how an absence of hare's horn can be directly perceived. For such a perception the relation between a hare's horn (i.e., a horn as qualified by the property of belonging to a hare) and the absence is necessary, but we can never cognize a horn as belonging to a hare.

Moreover, the Mīmāṃsakas seem to hold the awareness of both--the limiter of the counterpositive-ness and the counterpositive--as the cause of the perception of an absence. But this cannot be accepted. Gaṅgeśa points out that if we accept this explanation then we should have to hold that after the construction-free awareness of jar and jar-ness we may perceive the absence of jar. But as a matter of fact we cannot perceive the absence of jar if we only have the unrelated awarenesses of both jar and jar-ness; what is necessary is to have an awareness of a jar qualified by jar-ness, i.e., there must be an awareness of the limiter of the counterpositive-ness as qualifying the counterpositive. This explains why we cannot perceive the absence of a jar even though we have the construction-free, unrelated awarenesses of both jar and jar-

ness.

If we accept Gaṅgeśa's contention as true then we shall have to hold that the ordinary perception of an absence is of the nature of a relational awareness of the second order. This can be proved as follows. Although in the perception of an absence the cause is the awareness with the limiter of the counterpositive-ness as the qualifier and the counterpositive as the qualificand, while in a relational awareness of the second order the cause is the awareness with the limiter of the qualifier-ness as the qualifier and the qualifier as the qualificand (i.e., the causes of the two types of awareness, perception of absence and relational awareness of the second order are different), still whatever produces one type of awareness also produces the other type of awareness. Hence perception of absence will be of the nature of a relational awareness of the second order.

It may be argued that for the perception of an absence after a construction-free awareness it is not necessary to hold an awareness with the limiter of the counterpositive-ness as the qualifier; it is enough to hold that the limiter of the counterpositive-ness is known as the qualifier with anything at all as the qualificand, not necessarily the counterpositive. This will also prevent the awareness of an absence after construction-free awareness of the limiter of the counterpositive-ness, for in this awareness the limiter of the counterpositive-ness is not known as the qualifier of anything. Hence construction-free awareness cannot produce the perception of an absence. Thus there will be no difficulty in explaining the perception of the absence of a hare's horn, for there is no difficulty in knowing the property belonging to a hare as the qualifier of, say, fur (i.e., fur does belong to hares).

The Nyāya does not accept this theory of the cause of perception of an absence. For it points out that even if this theory can explain a perception of the absence of a hare's horn it cannot explain the perception of the absence of a horn as belonging to a hare. The difference between "absence of a hare's horn" and "absence of a horn as belonging to a hare" is that in the second absence the property of belonging to a hare is apparently the qualifier of horn and cannot be construed as a qualifier of the absence. Now in the perception of an absence of the second sort, where the counterpositive itself is qualified by a property, this property becomes the content of the awareness of absence only as the limiter of the counterpositive-ness. That is, whatever property is known as the qualifier of the counterpositive of an absence becomes the limiter of the counterpositive-ness described by the absence. This means that a property which is not known as the qualifier of the counterpositive cannot be the content of an awareness as the limiter of the counterpositive-ness. Thus the awareness of an absence is really a relational awareness of the second order, for it is the awareness of the relation of the counterpositive as related with the limiter of the counterpositive-ness with the absence, i.e., it is awareness of a relation of an entity already qualified by a qualifier. If this law is accepted, then there cannot be any perception of the absence of a hare's horn, because, according to the Mīmāṃsakas, there is no way of knowing a horn as qualified by the property of belonging to a hare, for this awareness if possible could only be false, and Mīmāṃsā does not admit the possibility of false awareness.

Mathurānātha therefore concludes that it is not possible to prove the reality of the perception of the absence of a hare's horn in a cow.

63.259.2.5. *Siddhāntalakṣaṇa*

63.259.2.6. *Sāmānyābhāva*

63.259.2.7. *Viśeṣavyāpti*

63.259.2.8. *Vyāptigrāha*

Summary by Kisor Kumar Chakrabarti

(E174) After discussing the nature of pervasion Gaṅgeśa moves on to the discussion of how pervasion is known. In this connection he first criticizes the rival view of Prabhākara. Before criticizing that view, however, he carefully explains and argues for that view and also uses the occasion to criticize an earlier Nyāya view that multiple observations are a necessary condition for grasping pervasion.

In the view of Prabhākara multiple observations of co-presence of the *hetu* and the *sādhya* as well as of the co-absence of them is not a causal condition of the perceptual grasp of pervasion. This is not to say that pervasion is not sometimes an object of a perception that results from multiple observation.

(E174-175) Objection: In Prabhākara's view pervasion is known from a single observation. Multiple observations are

nothing over and above a collection of single observations. If a single observation is a causal condition of the perception of pervasion, multiple observations too should be so.

Prābhākara: This is a misunderstanding. In Prabhākara's view a single observation is not a causal condition for grasping pervasion, for it is not his view that pervasion is an object of a perception that results from a single observation. Rather, his view is that pervasion is understood from grasping the relationship between all instances of the *hetu* and all instances of the *sādhya* and that that relationship may be grasped in a single observation.

(E175) One reason for questioning multiple observations requiring synthesis of many cognitive states as a causal condition is that there is no evidence to prove that it is indispensable for all cases of perception of pervasion. Thus there is the possibility that such perception takes place without multiple observations.

(E176-177) Objection: One may say that the impression (or trace, *saṃskāra*) of multiple observations serves as the causal operation (*vyāpāra*) of the perception of pervasion. That still makes multiple observations a causal condition (for a causal condition is not rendered dispensable for its causal operation).

Answer: But the qualificand and the qualifier of the trace must be the same as the qualificand and the qualifier of the memory. Otherwise there could be memory of one thing from the trace laid down by another. Clearly, however, the qualificand and the qualifier of grasping pervasion, which involves grasping the co-presence of one thing with another thing that is invariably concomitant with it, are different from the qualificand and qualifier of the trace laid down by multiple observations of the mere co-presence of one thing with another thing [1]

Objection: Pervasion is known through subjunctive reasoning (*tarka*) that supplements multiple observations.

Answer: But subjunctive reasoning is based on pervasion; if the pervasion, too, is known through subjunctive reasoning that again is based on pervasion, and there will be an

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[1]This argument is similar to the Humean argument that there is no trace (i.e., no impression) that can legitimize the idea of causal or inductive connection.

infinite regress.[1]

(E178-179) Objection: To avoid the regress one may hold that in some cases induction takes place without subjunctive reasoning. Is one such case found in such instinctive activities as that of a new-born baby suckling its mother for the first time right after birth? If so, the case may be spelt out as follows: suckling is a causal condition (or a reason, *hetu*) for pleasure, for one is indispensably related (*ananyathāsiddha*) by way of agreement in presence (*anvaya*) as well as agreement in absence (*vyatireka*) to the other. Whenever something is indispensably related to something by way of agreement in presence and/or agreement in absence, one of them is a causal condition (or reason) of the other. Such a basis or foundational pervasion at the foundation of subjunctive reasoning is known through (internal) perception without the help of subjunctive reasoning; hence there is no infinite regress (as alleged above).

(E179) Answer: Just because the new-born baby's memory of the relevant induction takes place without subjunctive reasoning, it doesn't follow that there is no infinite regress. For the memory would have to be grounded on a non-reproductive grasp of pervasion in a previous life, for which subjunctive reasoning would be needed, and this would lead to an infinite regress. And even if the regress is explained away here (as it is explained away in the case of the seed and the sprout) there would still be an infinite regress (unless it is countered with the help of some foundational causal or inferential principle indicated above) in such cases as grasping the pervasion between smoke and fire. (I.e., unlike the case of a sprout and a seed, where one cannot come into being without the other, in the case of smoke and fire the latter can come into being without the former; thus all pervasions where the pervaded and the pervader do not presuppose each other would fail the test [of being capable of stopping infinite regress].[2]

(E193) Gaṅgeśa says that pervasion is devoid of adjuncts from Prabhākara's point of view. This means that if the *hetu* is

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[1]This argument is similar to the Humean argument that all induction is inevitably circular.

[2]The answer here does not represent the position of Gaṅgeśa or Mathurānāthā. Still, the great ease with which that view has been clarified is remarkable.

co-located with the *sādhya* and such co-location is not dependent on any adjunct, the *hetu* is pervaded by the *sādhya*. Such a construal avoids overly extending the account of pervasion to a contradictory *hetu*, one which is devoid of adjuncts but is not co-located with the *sādhya*; thus, there is no over-extension.

If (to avoid admitting absence as a negative entity) an absence is identified with the locus (of absence) as it is, then an absence should be there even when its counterpositive is present; for the locus is still there. Further, (since a thing cannot be the locus of itself) how can it be explained that an absence is known to be located there? This is why some followers of Prabhākara explain absence to be relationship with the time when the counterpositive is missing.

(E193-194) It is not that awareness of pervasion primarily includes a reference to time. Hence some other followers of Prabhākara explain absence as awareness of the locus at the time when the counterpositive is missing. Since absence can be explained thus, it is uneconomical to admit absence to be an additional kind of entity (say these Prābhākaras rejecting the Nyāya view). Now pervasion is being devoid of obstructions (*upādhi*). The *hetu* is the locus of such absence of obstructions. Since absence is nothing over and above the locus (of absence), awareness of pervasion boils down to awareness of the *hetu*. When understood in this way it is not impossible for pervasion to be grasped in a single observation. A *hetu* is always devoid of obstructions. When a *hetu* is grasped, absence of obstructions is also grasped, for such absence is nothing other than the *hetu*; since pervasion is the same as such an absence, pervasion may also be grasped when a *hetu* is grasped. Thus in Prabhākara's view pervasion may be grasped in a single observation.

Objection to the Prābhākara: Awareness of an absence presupposes awareness of its counterpositive. If pervasion is the absence of obstructions, awareness of obstructions is presupposed for awareness of pervasion. Since an obstruction pervades the *sādhya* and does not pervade the *hetu*, such an awareness can take place only with the help of multiple observations; thus multiple observations are still necessary for grasping pervasion.

Prābhākara answer: No, since (despite what you said above) awareness of a counterpositive does not require awareness of an absence on our view

(E195) Mathurānātha: Linguistic usage about awareness of an absence, however, requires awareness of its counterpositive. Thus to say that there are no obstructions one must be aware of obstructions. The case is like the awareness of being long–the conditions for the perception of a substance include the conditions for awareness of the length of the substance; hence awareness of a boundary is not needed for awareness of length. But linguistic usage, such as "this is longer than that", presupposes awareness of the boundary limit of each the things.

(E196) If pervasion were grasped merely through awareness of the *hetu*, there could be inference of fire from smoke eve if the latter is mistakenly thought to deviate from the former.

Answer: The object is not sound, for lack of awareness of deviation too is a necessary condition of inference.

In the Prābhākara view pervasion may be grapsed when the *hetu* is known and all the conditions needed for finding an obstruction except the presence of an obstruction itself are fulfilled. But then how could there be inference when there is no sensory connection with the *hetu* (such as when the *hetu* is a past or future thing)? The answer is that (contrary to what Gaṅgeśa says on p. 195) non-apprehension of an obstruction when all other conditions for apprehending it (except its presence) are fulfilled is not a necessary condition for grasping pervasion. Rather, the necessary condition is awareness of lack of obstructions and that is possible even when the *hetu* is something (past or future) with which there is no sensory connection.

(E198) Although on the Prābhākara view the conditions for grasping pervasion supervene on the conditions of grasping the *hetu* and, therefore, pervasion may be grasped when the *hetu* is known, doubt as to whether the *hetu* is pervaded by the *sādhya* is still possible. When the *hetu* is known, it may not always be known that there is lack of obstruction(s). As long as there is absence of awareness of the absence of obstructions, such doubt is possible, for, properly construed, grasping pervasion also involves grasping that there are no obstructions and that may not always be grasped when grasping the *hetu*. It may be noted that in this view only a belief having the same qualifier is an obstruction to a doubt with that qualifier.

(E199-200) If the conditions of grasping pervasion supervene on those of grasping the *hetu*, should not something

not pervaded (by, say, fire), such as a donkey, that happens to be co-located with something pervaded, such a smoke, be also perceived to be pervaded? No. The object of perception is a causal condition of perception. Since the object of perception, viz. pervasion, does not belong to the thing not pervaded (the donkey) it not be perceived there It does not follow that nothing that is not pervaded would ever be said to be pervaded. From the Prābhākara viewpoint the latter may happen if there is memory of pervasion and there is lack of awareness of the lack of connection between that memory and the cognitive state under consideration.[1]

(E200-202) In the Prābhākara view pervasion boils down to being devoid of obstructions. Since absence in the Prābhākara view is reducible to the locus of absence and since absence of obstructions is located in the *hetu*, awareness of pervasion from the single observation of the *hetu* is possible. This main Prābhākara view is explained and elaborated in Gaṅgeśa (pp. 194-199). Some followers of Prabhākara, however, think that pervasion is graspable in a single observation and refuted in Gaṅgeśa (pp. 200-202). After that (on p. 202) beginning with the words "*maivam*" we have the criticism of the main Prābhākara view.

(E202-205) That an obstruction is that which pervaded the intended *sādhya* and does not pervade the *hetu* is an account of an obstruction (on p. 202) from the Nyāya viewpoint. That an obstruction is that which serves as the limiter of the relation between what is taken to be the *hetu* and the intended *sādhya* is an account of (an) obstruction (on pp. 202-203) from the Prābhākara viewpoint. In this context, a limiter is something that does not have a smaller extension (*anyūnavṛtti*) [i.e., it is unnecessary to add the further condition that a limiter should not also have a greater extension]. In the light of the Prābhākara account, since there is no *sādhya* co-located with the *hetu* if the *hetu* is contradictory, there can then be no obstructions either; but this is intended, i.e., no obstructions are admitted if the *hetu* is

[1]In the Prābhākāra view no cognitive state is erroneous in the sense of grasping something to be possessed of something that is absent there. Still, erroneous usage is possible; the latter is not a commission but an omission and may take place when there is lack of awareness of lack of connection between a remembered item and a presented item.

contradictory. Further, since an obstruction is the qualifier of the relation between the *hetu* and the *sādhya*, it follows that the obstruction would not pervade the *hetu*. This ensures that the *sādhya* would never be an obstruction if we have a sound *hetu*.

(E205) Still the Prābhākara account of an obstruction is not accepted for the following reason: in the Prābhākara view pervasion boils down to the *hetu* being without obstructions. But there are no obstructions if the *hetu* is sound. The negation of obstructions in a sound *hetu* then involves a counterpositive, viz. adjuncts belonging to a sound *hetu*, that is unfamiliar or unestablished (*aprasiddha*). Under the circumstances, being without obstruction cannot be true either of an unsound *hetu* where there are obstructions or of a sound *hetu* where the negation is a pseudo-negation. This objection presupposes the Nyāya view that for a negation to be acceptable both the negatum and the locus should be familiar or established.

(E206) To avoid the above difficulty, pervasion or being without obstructions could be reinterpreted. It may be reinterpreted as being co-located with a *sādhya* that deviates from all that deviates from the *hetu*. But when construed in this way (since awareness of deviation from deviation requires multiple observations) pervasion cannot be grasped in the first observation of the *hetu*. However, the above difficulty may also be avoided by reinterpreting the Prābhākara view as follows: pervasion is co-location of the *hetu* with a *sādhya* that is without obstructions. [Since *hetus* are not classified as sound or unsound and since some *hetus* are without obstructions and some are not, negation of obstructions can no longer be unfamiliar.] It should be noted that in the Prābhākara view negation of obstructions in the present interpretation is reducible to the *sādhya*. Co-location of the *hetu* with such a *sādhya* may then possibly be grasped in the first observation.

(E207) In the Prābhākara view awareness of the negatum is not required for awareness of negation. Suppose, however, that this is not so, as the Nyāya claims. Then being without adjuncts could not be grasped without awareness of obstructions and then, it may seem, a single observation does not suffice for awareness of pervasion. But this is not necessarily so. A single observation may take place when there is memory of the obstruction and also non-observation of it when it could be observed were it present. From the Prābhākara's viewpoint pervasion could grasped in such a single observation (though it may not be grasped from the first

observation of the co-location of the *hetu* with the *sādhya*.

(E207-208) It has been argued (by Gaṅgeśa in 205-206) that observation of co-presence or co-absence is common to both deviant and non-deviant *hetus*. Hence such observation alone leads to doubt that would block the belief in pervasion. But such doubt may not crop up in each and every case. Hence if there is memory of the obstruction and non-observation of it at the time of the first (or a later single) observation of co-presence or co-absence where there is no such doubt, belief in pervasion may be derived from the first (or a later single) observation.

(E208) However, the point (of Gaṅgeśa) is that there can be no belief if the conditions of doubt are fulfilled. The conditions of doubt in pervasion are fulfilled in a mere single observation of co-presence or co-absence (such observation being common to both deviant and non-deviant *hetus*) when there is no decisive evidence to rule out deviation. Hence single observation is not the proper method of ascertaining pervasion. It is also that whenever there is doubt of deviation at the time of a single observation, there is no ascertainment of pervasion.

(E210) The accepted view is that lack of awareness of deviation (of the *hetu* from the *sādhya*) and awareness of co-location (of the *hetu* with the *sādhya*) are (among) the causal conditions of grasping pervasion.

(E210-211) Lack of awareness of deviation should be admitted as a causal condition, for awareness of something is an obstruction to awareness of the absence of that thing and awareness of deviation blocks awareness of pervasion as lack of deviation.

Objection: Even if lack of awareness of deviation is recognized as a causal condition, awareness of pervasion may still take place while there is awareness of deviation, for awareness is not pervasive (i.e., does not pervade the self) and the former awareness may take place when and where there is lack of the latter awareness.

Answer: Although awareness of deviation is non-pervasive, the property of being the self characterized by such awareness is pervasive (i.e., pervades the self) and thus the causal connection holds.

(E213-215) Objection: Awareness of co-location should not be admitted as a causal condition of awareness of pervasion. First, there is no agreement in presence and agreement in absence between the one and the other. Second, there is no evidence to show that if all other causal conditions are available, the awareness of pervasion is delayed by delay in awareness of co-location.

Answer: The word "seeing" (*darśana*) should be taken in the instrumental case. Then the intended meaning is that the sensory connection involved in such awareness is a causal condition of the perceptual grasp of pervasion. However, Miśra and Bhaṭṭācārya think that awareness of co-location itself is a causal condition of awareness of pervasion; the latter awareness is that of the *hetu* and the *sādhya* as co-located or as being qualified by co-location and this requires, in this view, the prior awareness of co-location that is the qualifier (*viśeṣana*).

(E215-216) Objection: When we speak of lack of awareness of deviation, how should awareness be understood? Should it be taken to be a belief? But then there could be ascertainment of pervasion even if there is suspicion of deviation. Or should it be taken to be a doubt? But then there could be belief in pervasion even if there is belief in deviation.

Answer: What is meant is lack of awareness of deviation in general, i.e., lack of awareness of both belief or suspicion of deviation is a causal condition of grasping pervasion. This is the older view. However, in another view lack of belief in deviation is the causal condition for grasping that pervasion is possible (which is still awareness of pervasion) is not ruled out if there is mere suspicion of deviation.

(E217-218) The doubt of deviation need not always be removed by *tarka*. There may not be such doubt over each and every case of pervasion. No *tarka* is needed if there is no such doubt. Even when there is such doubt, no *tarka* to remove the doubt is called for if the place of that doubt is taken by a subsequent internal state and the doubt is gone. However, if the doubt persists and there is a stream of such states of doubt, a chain of *tarkas* is needed to remove the doubt as long as the doubt keeps on resurfacing.

63.259.2.9. *Tarka*

63.259.2.10. *Vyāptyanugama*

63.259.2.11. *Sāmānyalakṣaṇa*

63.259.2.12.*Upādhi*

Summary by Kisor Kumar Chakravarti

[The page numbering given in the summary below does not correspond to that used in the summary of Gaṅgeśa's *Tattvacintāmaṇī-Upādhi* in EnInPh Volume. 6. We have not been able to locate the edition used here by Prof. Chakravarti.]

(E294-295) That the discussion of obstructions is appropriate after the discussion of the method of ascertaining pervasion may be shown in several different ways. First, one may try to find an obstruction to thwart the ascertainment of pervasion needed for an opponent's argument. One may also seek to eliminate obstructions for ascertainment of pervasion needed for one's own argument. Since for both of these knowing about an obstruction is useful, the ensuing discussion of obstructions is appropriate by way of the kind of relevance called "close connection" (*prasaṅga*).

Second, both eliminating obstructions paving the way for ascertainment of pervasion needed for one's own argument, and finding an adjunct blocking the pervasion needed for an opponent's argument, may contribute to the same result, viz. victory in a debate. Thus, as pointed out by Mathurānātha's father [i.e., Rāma Tarkālaṃkāra], the discussion of obstructions is appropriate in terms of the kind of relevance called *ekakāryānukulatva* or contributing to the same result.

Third, while finding an obstruction rules out pervasion, elimination of obstructions paves the way for ascertainment of lack of deviation (*avyabhicāra*) that is pervaded by obstructions (i.e., an obstruction is involved in each and every case of deviation in the sense that there is always something that pervades the putative pervader and does not pervade the putative pervaded in each and every case of deviation). Thus an obstruction may indirectly contribute to ascertainment or lack of deviation if lack of awareness of deviation is a necessary condition for belief in pervasion; accordingly, the ensuing discussion is appropriate, as pointed out by Miśra, in the light of the kind of relevance called *upodghāta* or implied indirect connection.

(E296) What is an obstruction? A familiar view is that an obstruction is that which pervades the putative *sādhya* and does not pervade the putative *hetu*. But then in order to give an; account of an obstruction one mentions pervasion and in order to give an account of pervasion one mentions being free from adjuncts–this is circular. Can this circularity be avoided if in one case pervasion is explained through absolute absence (*atyantābhāva*) and in the other case pervasion is explained through difference (*anyonyābhāva*)? No, for that would still not avoid the infinite regress.

(E296-297) The above familiar view may be restated as follows: an obstruction is that which is not the counterpositive of any absolute absence belonging to the locus of the *sādhya* and is the counterpositive of an absolute absence belonging to the locus of the *hetu*. This is more economical, for it avoids mentioning pervasion. Still, one problem is the following. In the sound inference of fire from smoke the fuel for fire pervades fire, the *sādhya*, but does not pervade smoke, the *hetu*; thus the account seems to become too wide. However, this problem can be avoided by reinterpreting an obstruction as follows. An obstruction is that which has the characteristic that is not the limiter of counterpositive-ness of any absolute absence belonging to the locus of the *sādhya* but is nevertheless the limiter of an absolute absence belonging to the locus of the *hetu*.

(E300) In the unsound inference that air is perceived because of possessing something that is perceived, manifest color is an instance of an obstruction that does not pervade the *sādhya*, viz. being perceived (manifest color being missing in internal states that are perceived) but does pervade the *sādhya* as specified by the intended feature of being an external substance (i.e., all external substances that are accepted by both sides to be perceptible have manifest color) that belongs to the inferential subject, viz. air. On the other hand, in the unsound inference that the lame man is dark because of being a child of Mitra, consumption of certain vegetables is an instance of an obstruction that does not pervade the *sādhya* but pervades the *sādhya* as specified by the *hetu* (i.e., although it may not be true that all dark persons have consumed certain vegetables, it may be true that all dark children of Mitra have consumed certain vegetables).

(E300-303) A possible objection to regarding all instances of the property of 'not being the *pakṣa*' as obstructions is the following. All-pervading properties like being knowable are also instances of 'not being the *pakṣa*' (i.e., being knowable is not the inferential subject in the sound inference that the hill is fiery because of being smoky). While an obstruction does not

pervade the *hetu,* such all-pervading properties would always pervade the *hetu* and hence fail to fit the description of an obstruction.

As an answer it may be suggested that even such all-pervading properties would not pervade the *hetu* by way of the relation of identity (i.e., such properties are not the same as the *hetu*). But that invites the difficulty that (while an obstruction should pervade the *sādhya*) such properties would not pervade the *sādhya* because of being necessarily missing in the *pakṣa* by way of the relation of identity (i.e., it is never true that the *pakṣa* is not the *pakṣa*).

To resolve this difficulty it may be suggested that the *pakṣa* should be bracketed while determining if something pervades the *sādhya*. Otherwise, even for some accepted obstructions, that they pervade the *sādhya* would be hard to determine. That is, obstructions that are known not to belong to the *pakṣa* could not ordinarily be said to pervade the *sādhya* unless the *pakṣa* is bracketed. It follows that the doubt over whether the *sādhya* belongs to the *pakṣa* and the consequent doubt over deviation are not obstructions to ascertaining that an obstruction pervades the *sādhya*.

(E301) The issue of whether 'not being the other' is a superfluous qualifier is relevant because the lack of an obstruction is a *hetu* for inferring the lack of the *sādhya*. It should be noted that nothing superfluous should be included within the body of a *hetu*.

(E304) With reference to the sound inference that the hill is fiery because of being smoky some other problematic properties (besides 'not being the hill') are as follows: 'not being what resides in parts of the hill', 'being a substance other than the hill', 'not being the locus of the contact between the lake and the hill', 'not being the hill as qualified by not being the lake', 'not being the lake as qualified by not being the hill', and so on.

For those who favor adding the qualification of being devoid of any qualifier that is not necessary to prevent presence in a negative instance, the account of an obstruction is as follows: an obstruction is that which does not include a qualifier that is not needed to prevent presence in a negative instance and that which is possessed of a characteristic that is the limiter of the counterpositive-ness of an absolute absence in the locus of the *hetu* and is not the limiter of any absolute absence in the locus of the *sādhya*

(E305) "Not being the *paksa*" should be accepted as an obstruction: it suffices to prove deviation like other obstructions.

(E306) A futile rejoinder (*jāti*) is a self-refuting rejoinder and, as the very name implies, is incapable of being the basis of refutation. Since "not being the *pakṣa*" is a proper ground for refutation, it cannot be a futile rejoinder.

The other way (*prakārāntara*) mentioned by Gaṅgeśa may be explained as "being different from 'not being the *pakṣa*' that is not linked to a case of intermanding" and so on.

(E306-307) That something deviates from the *sādhya* is inferable from that something's deviating from the obstruction, given that the obstruction pervades the *sādhya*.[1]

(E307) When Gaṅgeśa says that there is the same kind of confirmation for both, what he means is that just as there is the perception of co-presence of the *sādhya* and the obstruction and (a) non-perception of deviation leading to the the generalization that the obstruction pervades the *sādhya*, so also there is the perception of the co-presence of the *hetu* and the *sādhya* and (a) non-perception of deviation leading to the generalization that the *sādhya* pervades the *hetu*. It is understood that in such a case the fact of deviation is not already known. If the fact of deviation were already known, the search for an obstruction would have been superfluous. But the following should also be kept in mind. When there is a favorable subjunctive reasoning lending support to the obstruction's pervading the *sādhya* and there is no favorable *tarka* lending support to the *sādhya*'s pervading the *hetu*, then there is room for inferring deviation.

If the obstruction does not pervade the *hetu* that is pervaded by the *sādhya*, it follows that the obstruction does not pervade the *sādhya*.[2]

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[1]The argument may be formalized as follows, where 'Ex' is the existential qualifier and '=' means material implication: (Ex)~Ax; (X)(Px = Ax); so (Ex)~Px. This deduction shows that Mathurānātha is interested in formal validity as well.

[2]This argument may be formalized as: some M are not A; all M are P; so some P are not A. This deduction too shows that Mathurānātha is paying attention to formal validity: ...*sādhya-vyāpya-hetu-avyāpakatayā upādheḥ*

(E307-308) With reference to the view that an obstruction leads to a counter-inference of the absence of the *sādhya* in the *pakṣa*, the following objection may be raised:

Objection: If the obstruction does not pervade the *hetu* that is pervaded bv the *sādhya*, the obstruction does not pervade the *sādhya* either. How then can the absence of the *sādhya* be inferred from the absence of the obstruction? [The inference of the absence of the *sādhya* from the absence of the obstruction that does not pervade the *sādhya* is formally invalid. On the other hand, the inference of absence of the *sādhya* from the absence of the obstruction that pervades the *sādhya* is formally valid. Mathurānātha is clearly distinguishing between the two, accepting the latter and rejecting the former. This again shows his grasp of formal logic.]

(E308) Answer: The objection is not sound. For the view that an obstruction leads to a counter-inference of the absence of the *sādhya,* viz. (1) the *hetu* that deviates from the obstruction is not needed, and similarly, (2) that the obstruction does not pervade the *hetu* that is equivalent (being knowable from the same evidence or observation (*tulya-vitti-vedyatayā*)) to that *hetu* deviates from the obstruction is also not needed. Indeed, there is room for that counter-inference only if it is not known that the obstruction does not pervade the mark.

(E309) The view that the inference of absence of the *sādhya* from the absence of the obstruction suffers from the flaw of being too-specific (*asadhāranya*) in cases of countermanding is based on the following construal of that flaw: a *hetu* that belongs to the *pakṣa* alone suffers from the flaw of being too-specific. In countermanding what is intended is absence in the *pakṣa* of the *sādhya* as it is.

Take the countermanded inference that this pot, being an earthen substance, is possessed of this smell before the origin of this smell. Here too, not being the *pakṣa* is an obstruction.

(E310) With reference to (Gaṅgeśa's) property of not being the locus of the contact between the lake and the hill, it should be kept in mind that it is an obstruction in the inference of fire in the hill that is in contact with the lake.

(E311) The flaw of being too-specific is (more widely)

sādhya-avtāpākātvājñānāt...

construed as that of being absent from all positive instances and all negative instances. Under this construal, even if "not being the *pakṣa*" were subject to the flaw of being too-specific, it could still be accepted as an obstruction, for even a too-specific *hetu* in this sense may lead to counter-inference and thus obstruct the inference.

(E312) If the flaw of being too-specific were construed as being absent in all the positive instances, awareness of this flaw would be an obstruction to awareness of the co-presence of the *hetu* and the *sādhya*, and thus an obstruction to ascertaining that the *hetu* is always co-located with the *sādhya*.

(E312-313) The opposition (*virodha*) should be understood on the one hand as the opposition between being pervaded by the *sādhya* and not being pervaded by what pervades the *sādhya*, and on the other between pervading the *sādhya* and not pervading what is pervaded by the *sādhya*.[1]

(E313) An obstruction is a fault by way of paving the way for fear of deviation: this is Udayana's view.

The view that an obstruction is that which does not pervade the *hetu* and is equipollent with the *sādhya* that is criticized by Gāṅgeśa is held by Udayana. Since "not being the *pakṣa*" is not equipollent with the *sādhya*, the above view is here adopted by the objector to avoid admitting that not being the *sādhya* is an obstruction.

Both an obstruction that is equipollent with the *sādhya* and one that is not undermine the inference to that *sādhya*. Both kinds of obstructions suffice to prove that the *hetu* deviates from the *sādhya* because of deviating from the obstruction (that pervades the *sādhya*) or alternatively, that the *sādhya* is absent from the *pakṣa* because the obstruction (that pervades the *sādhya*) is absent there.

(E314) Being invariably connected (*prayojakatva* in Gaṅgeśa's 313) here means being connected both by way of universal inclusion and universal exclusion. This is offered by the objector as yet another reason (rejected by Gaṅgeśa) for not

[1]That is, it is inconsistent to say that the *hetu* is pervaded by the *sādhya* and also that the obstruction that pervades the *sādhya* does not pervade the *hetu*. This may be formally stated as: all M are P, all P are A and some M are not A. All M are P and all P are A imply that all M are A; but all M are A and some M are not A are contradictory. The other opposition may be formally shown in a similar way. Once again, this points to Mathurānātha's command of formal relations.

admitting something non-equipollent with the *sādhya* as an obstruction so that "not being the *pakṣa*" and so on can be excluded from obstructions.

(E315-316) One meaning of the word "*upādhi*" in popular usage (that is explored by the objector to provide yet another [failed] reason to exclude non-equipollent properties from obstruction-hood) is that it is a feature that is mistakenly attributed to something when that feature actually belongs to something else. It does not follow, however, that there is one uniform basis for calling something an obstruction in all cases. On the other hand, the basis for such usage may be particularized for particular cases.

(E317-318) "That absence which (*yadabhāvah* in Gaṅgeśa) (that is part of yet another failed attempt to exclude non-equipollent properties from obstruction-hood) may be construed as an absence the counterpositive-ness of which is specified by (1) the intended character and (2) the relation of not being pervaded. The second specification is useful for excluding non-equipollent properties like wet fuel: such properties are absent in the said relation in themselves where it is not true that there is lack of deviation from the *sādhya*. Is the relation of not being pervaded, since it does not signify occurrence, unsuitable for specifying such absence? No. A cognitive state such as "there are not obstructions in this *hetu*" (that signifies occurrence) shows that even a relation that does not signify occurrence may be such a limiter.

(E318) Being opposed to deviation means being coextensive with lack of deviation. This may be explained further as not being present where something deviant is present and being present wherever there is absence of deviation.

(E320) In the opinion of Bhaṭṭacārya [i.e., Raghunātha Śiromaṇi, see p. 440, note 1] the sum total of causal conditions of fire is an obstruction in the inference of fire.

(E321) "Not being pervaded by that" may be explained as belonging to something that is not possessed of that.

(E322) It may be thought that a property that is co-extensive with the *sādhya* is not always available as an obstruction in all cases of deviation. This may be thought further to tell against limiting obstructions to only such co-extensive properties, for there must be an obstruction in all ceases of deviation. But this is not correct. From this point of view the *sādhya* itself and other such properties as the sum total of causal conditions of the *sādhya* that are coextensive with the

sādhya are necessarily available as obstructions (in unsound inferences).

(E323) There is no fear of there being always obstructions in even sound inferences, for being pervaded by something that is pervaded by the *sādhya* rules out something being an obstruction: in other words, something is an obstruction if and only if it is not pervaded by anything that is pervaded by the *sādhya*.

(E325) In the case of a contradictory (*viruddha*) *hetu* the *sādhya* is never co-located with the *hetu*.

With reference to the inference that sound is nameable because of being knowable, inaudibility is only a *prima facie* obstruction and not an actual (*vastu*) obstruction, for inaudibility does not belong to the *pakṣa* where the *sādhya* is present.

(E326) The apprehension--that a putative obstruction may not pervade the *sādhya* because the former is absent in the *pakṣa* where the latter may be present--is not an obstruction to the belief that the obstruction pervades the *sādhya*.

In the inference that water is knowable because of being moist "being of the nature of earth" is a *prima facie* obstruction and not an actual one, for that property does not belong to the *pakṣa* where the *sādhya* is present.

(E327) In Gaṅgeśa's 326 *sopādhitvāt*, etc. refers to an inference that a certain *hetu* lacks the ability to prove, such as "fire is not capable of proving smoke because of being beset with an obstruction".

(E329) That a *hetu* lacks the ability to prove is inferred with the help of a particular substitution instance such as that something is not pervaded by wet fuel and so on and not with the help of the schematic inference of deviation from that which pervades the *sādhya* making use of general terms alone.

The charge of being at an inappropriate time (*aprāptakālatva*) in Gaṅgeśa's text is raised because of stating something unintended, viz. deviation from the *sādhya* as qualified, while what is intended is deviation from the *sādhya* as it is.

The view of Prabhākara is taken up for criticism in Gaṅgeśa beginning with the word "first" (*prathamam*).

(E330) The view of the author of the *Ratnakośa* is taken up for criticism in Gaṅgeśa beginning with the words "*syādetat*". In this view an obstruction is not a fault by way of proving that the *hetu* is deviant, for deviation from what amounts to the

sādhya based on the nature of the *pakṣa* is not necessarily opposed to the *hetu* being pervaded by the *sādhya* as it is. Rather, an obstruction is a fault by way of leading to the counter-inference of the absence of the *sādhya* in the *pakṣa*.

(E331) Objection: The inference that sound is non-eternal is a sound inference (from the Nyāya standpoint) and therefore unsuitable for illustrating an obstruction.

Answer: But this illustration has been given from the viewpoint of Mīmāṃsā which holds that sound is eternal. Alternatively, the word "sound" (*śabda*) may be interpreted to suggest that the intended *pakṣa* is soundness, and then we have the unsound inference that soundness is non-eternal and so on.

Objection: This procedure can make even a sound inference like that of fire on a hill from smoke vulnerable. Since hill-ness, being stony, etc. pervades fires on hills (that could be interpreted to be what amounts to the *sādhya* from the nature of the *pakṣa*, a hill) but do not pervade the *hetu*, smoke, these could be obstructions.

Answer: The objection overlooks the fact that an obstruction is additionally understood to be absent in the *pakṣa* (so that it could lead to the counter-inference). Since those properties (viz. hill-ness and stony-ness) are present in the *pakṣa* they are not obstructions.

(E336-341) In Gaṅgeśa 336 what we have, beginning with the words "because of deviation from which", is the limiter of *definiendum*-ness. This too can serve as a definition. Still (in the next sentence) another definition is offered that spells out the way in which an obstruction undermines an inference.

(E345) In Gaṅgeśa's text, beginning with the words "*tathāhi*", we have the structure of the inference of the *hetu* being deviant from the *sādhya* based on that *hetu*'s deviating from the obstruction.

(E346-347) In Gaṅgeśa's text we have the explanation of how deviation from the *sādhya* follows from deviation from the *sādhya* as qualified.

Objection: Negation of the qualified is not the same as negation of the qualificand. How then can the former follow from the latter?

Answer: It should be kept in mind first that negation of the qualificand necessarily implies negation of the qualified [analogous to the logical truth that if A is false then A and B is necessarily false]; second, if it is given that the *hetu* does not deviate from the qualifier and still deviates from the qualified, (since the qualified has the two components of the qualificand and the qualifier) deviation from the qualified resolves into deviations from the qualificand that is the only remaining alternative. In other words, when there are only two alternatives and one is given as false (*itarabādha*) the other remaining alternative is true. [This is analogous to the logical truth that if A is true and A and B is false then, since either A or B must be false, it follows necessarily that B is false.]

(E347) In this connection one may have another concern. In an inference the limiter of pervader-ness (*vyāpakatvāvacchedaka*) is featured as the qualifier (*prakāra*). [For example, in the inference of fire from smoke the qualifier is fire-ness, which is the limiter of the fact that fire pervades smoke.] But this does not happen when deviation from the *sādhya* is inferred from deviation from the *sādhya* as qualified with the help of negating the other alternative. Could such an inference then be a case of the fault of changing the subject (*arthāntara*)? No. In an inference with the help of negating the other alternative it is not required that the limiter of pervader-ness should be the qualifier. Although the limiter of pervader-ness is not the qualifier in such an inference what is inferred is nevertheless that which is limited by the limiter of pervader-ness as well as the limiter of *sādhya*-ness.

(E355) It should be noted here that when Gaṅgeśa says that changing the subject is a fault of the individual debater, it seems to suggest that this is merely a ground of defeat of that person. However, this does not represent Gaṅgeśa's own view but of someone else. [That is, changing the subject is not only a ground of defeat but also a fault of reasoning to be subsumed under an appropriate kind fallacy (*hetvābhāsa*) on a case to case basis]. The main point of Gaṅgeśa there is that being a positive entity (*bhāvatva*) is for certain an obstruction in the unsound inference that since posterior absence has a beginning, it could come to an end (if the thing destroyed could be re-originated), and so on in other cases.

(E356) The admission of "not being the *pakṣa*" and so on as obstructions may appear to be self-refuting (*svavyāghātaka*) in the following sense. An obstruction becomes a flaw by way of leading to the inference that the *hetu* deviates from the *sādhya* on the basis that the *hetu* deviates from the obstruction and that the obstruction pervades the *sādhya*. If "not being the *pakṣa*" were admitted as an obstruction, then, since this would turn out to be an obstruction for all such

inferences, even the inference that the *hetu* is deviant would become unsound; then that this is an obstruction could not be shown. But the said property should not be admitted as an obstruction, for that it pervades the *sādhya* is questionable whenever it is not known for sure that the *sādhya* is absent in the *pakṣa* where that property is necessarily absent. In the absence of supportive *tarka* the fear of deviation is not removed even when there is observation of co-presence and co-absence in a large number of cases.

(E357) The supportive *tarka* for fire from wet fuel's (the obstruction's) pervading smoke (the *sādhya*) is that when there is more such fire, there is more smoke.

The supportive *tarka* for manifest color's the obstruction)pervading "being an externally perceptible substance" (the *sādhya*) is that in all undisputed cases anything that is an externally perceptible substance is possessed of manifest color and nothing without manifest color is an externally perceptible substance.

(E357-358) The *tarka*, as may seem to be suggested by Gaṅgeśa, for posterior absence's being endless is that the thing destroyed would, for such an absence to end, have to be re-originated. Indeed, it may be held that there can be absence of prior absence or posterior absence only when the counterpositive exists. But this is not right. There is absence of prior absence not only when the counterpositive is originated but also when the counterpositive is destroyed. So it need not be the case that the thing destroyed would have to be re-originated from the posterior absence to come to an end. However, if posterior absence were to come to an end, it could come to an end an endless number of times for which one would have to admit an endless number of causal sequences. Compared to that it is more economical to admit that posterior absence is endless.

(E358) One may ask if all pervasions are directly based on the cause-effect relation. The answer is: No. There are also pervasions, like that between being water and being a substance, that are not directly based on that relation. However, even in such cases an indirect link with a causal relation is useful for justifying the pervasion. For example, if being water were to deviate from being a substance, the former could also deviate from contact, for only a substance can be the inherence cause (*samavāyikāraṇa*) of contact. Thus the causal connection between being a substance and contact provides

indirect support to the *tarka* favoring the induction that being a substance pervades being water.

(E358-359) There are cases where the evidence from observation of co-presence and non-observation of deviation for belief that the obstruction pervades the *hetu* and the same kind of evidence for the obstruction's pervading the *sādhya* are evenly matched. In such cases suspicion of an obstruction (*upādhisandeha*) is a fault. If in such a case there is the support from favorable *tarka* for the *sādhya*'s pervading the *hetu*, the pervasion is ascertained (and suspicion of obstruction is removed). On the other hand, if in such a case there is support from favorable *tarka* that the obstruction pervades the *sādhya*, the latter pervasion is ascertained (and this becomes a case of a certain obstruction).

(E359-360) It seems to be suggested in Gaṅgeśa's 358 that "not being the *pakṣa* is self-refuting and, therefore, incapable of leading to the doubt that the *hetu* is deviant and, therefore further, falls short of a suspect obstruction. But this is a *prima facie* view. There is no overriding reason to show that "not being the *pakṣa*" cannot lead to the fear of deviation. Indeed, it is not that "not being the *pakṣa*" is self-refuting. If in some cases that the said property pervades the *sādhya*is supported by a favorable *tarka*, it may be inferred in those cases that the *hetu* deviates from the *sādhya* on the ground that the *hetu* deviates from that property; such an inference of deviation in those cases would not be flawed by suspicion that another instance of the said property could crop up as an obstruction. As a matter of fact, if there is no decisive reason to show that the *sādhya* pervades the *hetu*, the suspicion of "not being the *pakṣa*" as an obstruction does suffice to obstruct the generalization that the *sādhya* pervades the *hetu*. Still, by virtue of an understanding among the debaters the suspicion of "not being the *pakṣa*" is not raised as an objection in debate.

(E360) Note the following: once the *pakṣa* is bracketed, the evidence from observation of co-presence and non-observation of deviation in all other cases seems to show both that "not being the *pakṣa*" pervades the *sādhya* as well as the absence of the *sādhya*. Under the circumstances, since the said property is missing in the *pakṣa*, both presence and absence of the *sādhya* in the same *pakṣa* would seem to follow. But this is not possible. The same property cannot pervade both the *sādhya* and its absence. This is quite different from the case of counter-inference. In the latter presence and absence of the

sādhya in the same *pakṣa* are sought to be proved with the help of two different *hetus* and not the same *hetu*.

(E362-363) It seems to be suggested by Gaṅgeśa that both an obstruction and lack of favorable *tarka* should be recognized as faults. It also seems to be suggested that lack of favorable *tarka* is useful for detecting an obstruction. But these are *prima facie* views. Lack of favorable *tarka* is not a necessary condition for detecting an obstruction and does not invariably preceded such detection. There is also no other way in which the former may be said to be needed for the latter. It should also be noted that favorable *tarka* is not a necessary condition for generalization. Indeed, there may be situations where there is no favorable *tarka* and yet the fact of deviation is not known in any other way except that an obstruction has been detected. In such a case an obstruction serves as the fault that obstructs the generalization.

(E364-365) In Gaṅgeśa's text we have the account of an obstruction as due to the absence of which the *hetu* deviates from the *sādhya*. This account is from the viewpoint that an obstruction is a fault by way of proving deviation. According to another account, an obstruction is that feature due to the absence of which the *hetu* fails to relate the *sādhya* to the *pakṣa*. This latter is from the viewpoint that an obstruction is a fault by way of paving the way of counter-inference of absence of the *sādhya* in the *pakṣa*.

(E369) "Not being the *pakṣa*" is without any doubt an obstruction in such an unsound inference (where absence of the *sādhya* in the *pakṣa* is known) as that an iron ball is smoky because of being fiery.

(E374) It may be noted that omnipresent properties like knowability cannot be obstructions by way of self-linking connector (*svarūpasambandha*), for they are present everywhere by way of that relation.

(E376) In Gaṅgeśa's text we have the view "held by some" that in some cases even something that pervades the *hetu* may be an obstruction. This is from the viewpoint that an obstruction is a fault by way of proving the absence of the *sādhya* in the *pakṣa* from the absence of the obstruction there. In the light of this view in some unsound inferences, such as the lake is fiery because of being smoky, the sum total of causal conditions of fire, the *sādhya* that pervades smoke, the *hetu*, turns out to be an obstruction and this is acceptable given the above view. For this to be possible the *hetu* must be absent from the *pakṣa*. If the *hetu* were present in the *pakṣa*, the obstruction that pervades the *hetu* in this kind of case must also be present there; but then it could not be an obstruction, for something that is present in the *pakṣa* cannot be an obstruction.

(E376-377) In the light of this view above, not only the sum total of causal conditions of the *sādhya* but also even the *sādhya* itself may in the said kind of cases seem to turn out to be an obstruction. But this is not accepted, for then inferring for others (though not inferring for oneself) would be ruled out. The bottom line, however, is that claiming the *sādhya* to be an obstruction goes against the debating tradition and, hence, is not done.

One kind of suspected (*sandigdha*) obstruction is found when it is not certain but questionable that the obstruction does not pervade the *hetu* (while it is certain that the obstruction pervades the *sādhya)*. In such a case there is suspicion (but not certainty) that the *hetu* deviates from the *sādhya* (and this may, depending on the nature of additional evidence, eventually cast doubt on the reliability of the inference).

Another kind of suspected obstruction is found when it is questionable that the obstruction pervades the *sādhya* (while it is certain that the obstruction does not pervade the *sādhya*). This leads to the suspicion that the *sādhya* may not pervade the *hetu* (that may cast doubt on the reliability of the inference). [That is, both kinds of suspected obstructions may lead to doubt about the reliability of the inference.]

(E380-381) The inference to God as the causal agent of the earth (dyad) has been mentioned by Gaṅgeśa as a case where "being produced by a body" is a suspected obstruction. Although that inference is accepted as sound (by the Nyāya school), citing it as a case of a suspected obstruction is not inappropriate under certain circumstances. The room for the said suspected obstruction arises if it is not shown with the help of a favorable *tarka* that the *hetu* of being an effect is pervaded by the *sādhya* of having a causal agent or if it is not shown through such reasoning that the said property pervades the *sādhya*.

(E383) In the discussion of why an obstruction is an inferential flaw it is understood that a inferential flaw is that awareness of which obstructs either inferential awareness or one of its necessary conditions.

(E398-399) A pseudo-obstruction is that the absence of which suffers from the flaw of being too-specific in the

inference of absence of the *sādhya*. The flaw of too-specific-ness is here understood as being absent from all positive instances. Such a property, then, does not belong to anything where there is for certain absence of the *sādhya* (of the original inference) that is the *sādhya* (in the inference of absence of the former *sādhya* with the help of such a property). In other words, a pseudo-obstruction is that absence of which is not co-located with the absence of the *sādhya*. For example, in the inference of fire in the hill from smoke "not being the hill" is a pseudo-obstruction. [That is, absence of not being the hill would not be a proper ground for inferring absence of fire. The said property, or being the hill, is absent from all places such as lakes where absence of fire, the *sādhya*, is certainly known to be present.]

(E399-400) Some earlier thinkers have taken the flaw of only-positiveness in this context to be absence from both all positive instances and all negative instances. But this is uneconomical. For example, in the countermanded inference that fire is not hot because of being a product, "not being fire" is not a pseudo-obstruction. To leave out such properties it suffices to say that a pseudo-obstruction is that which is absent from all positive instances (that happen to be negative instances with reference to the original inference) and it is superfluous to add that a pseudo-obstruction should also be absent from all negative instances (that happen to be positive instances with reference to the original inference). Further, in the only-negative inference that earth is different from other things because of being a substance, not being earth is a pseudo-obstruction. But the earlier account would not cover it and leaving it out is improper.

(E400-401) One may say that in this context absence of the obstruction is pervaded by absence of the *sādhya* and thus absence of the obstruction in the *pakṣa* obstructs the inference of the *sādhya* in the *pakṣa*. Hence the point of the earlier view is that in such cases awareness of absence of the obstruction being pervaded by absence of the *sādhya* is impossible. But this is not right. The flaw of only-positiveness that is ultimately an obstruction to awareness of the co-presence of the *hetu* with the *sādhya* is not incompatible with being pervaded by absence of the *sādhya*.

(E401) The kind of pseudo-obstruction called *aprasiddhasādhyaviparyāsa* (the case where absence of the *sādhya* is not accepted) is possible if absence of the *sādhya* as limited by the limiter of *sādhya*-ness does not exist anywhere at any time. In other words, in such a case the limiter of *sādhya*-ness is not the limiter of the counterpositive-ness of any absolute absence and the *sādhya* is omnilocated. Not only "not being the *pakṣa*" but also anything whatsoever is a pseudo-obstruction in such a case, for there will be failure of either pervasion of the *sādhya* or failure of non-pervasion of the *hetu*. [That is, if the *sādhya* is omnilocated, nothing can possibly pervade the *sādhya* and fail to pervade the *hetu*, so nothing can be an obstruction.]

(E402) Besides the widely-accepted view of a pseudo-obstruction mentioned earlier, there is another view held by some that is based on the following account of an obstruction, viz. an obstruction is that which pervades the *sādhya* as limited by the intended feature of the *pakṣa* and does not belong to the *pakṣa*. In the light of this view the kind of pseudo-obstruction called *bādhitasādhyaviparyāya* (the case where absence of the *sādhya* is countermanded) may be explained as the case where absence (that is co-located with such a property) of the *sādhya* as limited by the limiter of *sādhya*-ness is countermanded in the *pakṣa*.

(E403) Some hold that in the context of counter-inference absence of the previous *hetu* (i.e., the *hetu* of the original inference) is always an obstruction. But this is not accepted. That is, in some cases such absence is a pseudo-obstruction.

(E405) The kind of pseudo-obstruction called *pūrvasādhanavyāpyavyatireka* (the case of absence or negation of something pervaded by the previous *hetu*) may be illustrated as follows. First, there is the inference that something has a causal agent because it exists for a limited time. All non-eternal things exist for a limited time. Thus non-eternal-ness is pervaded by the *hetu* "existing for a limited time". Now take the counter-inference that that thing does not have a causal agent because of being unoriginated. In this counter-inference eternality–that is, negation or absence of non-eternality–that is pervaded by the previous *hetu* is such a pseudo-obstruction, for it pervades the *hetu* "being unoriginated" (if eternality is interpreted as existence without a beginning).

The kind of pseudo-obstruction called "not being either the *pakṣa* or a negative instance" (*pakṣavipakṣānyataratva*) is illustrated by "not being either the hill or a lake" with reference to the inference that the hill is fiery because of being smoky. [That 'not being either the hill or a negative instance'

pervades fire is not supported by a *tarka*. Further, the said property is necessarily missing in the hill where fire may be present and thus that the said property pervades fire is questionable.] Not all such properties are pseudo-obstructions however. For example, take the (unsound) inference that the iron ball is smoky because of being fiery. With respect to this inference "not being the iron ball or a lake" is an obstruction proper.

(E405) "*Pakṣetara*" etc. in Gaṅgeśa should be taken to mean being a locus of the *sādhya* other than the *pakṣa*. (Such a property is extensionally equivalent to the immediately previous property of not being either the *pakṣa* or a negative instance.) Like the immediately previous case some instances of this property are pseudo-obstructions and some are not. (For example, with reference to the sound inference that the hill is fiery because of being smoky "not being the hill and being possessed of smoke" is a pseudo-obstruction, for that it pervades fire is questionable.) On the other hand, with reference to the unsound inference that the iron ball is smoky because of being fiery "not being the iron ball and having smoke" is an obstruction proper.

63.259.2.13. *Pakṣatā*

"E" references are to Jivananda Vidyasagara's edition as reprinted in a Second Edition from Calcutta, 1879.

Summary by Sunil Kumar Das

1 (E79-85) The *Pakṣā* as Doubt about the *Sādhya*. The old Nyāya view is that being the *pakṣa (pakṣatā)* consists in being the subject of doubt about the presence of the *sādhya (sādhyasaṃśaya)* in the context of an inferential awareness *(sandigdhasādhya-dharmatvaḥ pakṣatvam)*. According to some, *pakṣatā* is the property of the *pakṣa*, and the *pakṣa* is that in which the *sādhya*'s presence has been doubted. This property is present in the *pakṣa* through the qualificand-ness relation *(viśeṣyatāsambandha)* and is thus a property of the *pakṣa*.

Mathurānātha discusses two interpretations of this. (These correspond to (1) and (2) in the summary of Gaṅgeśa's text as found in EnInPh Volume Six, p. 193.) On the first, the "*dharmatva*" referred to in the definition featured in the preceding paragraph doesn't mean property, that is, it is not intended as a delimiter *(vārtaka)*, since the definition so

understood would fail to apply to an inferential awareness where *ākāśa* is the *sādhya*, since *ākāśa* is never a property of anything. So all that "*pakṣatā*" means is the *sādhya* about which there is doubt whether it is present or not.

On the second interpretation *pakṣatā* is the property in terms of which there is doubt about the presence of the *sādhya* in the *pakṣa (sandigdhaḥ sādhyaḥ yena dharmeṇa tadeva pakṣatāḥ)*. The *pakṣa* is that of which the limiter of the qualificand-ness *(viṣayatāvacchedaka)* of the doubt about the presence of the *sādhya* has become a property, and *pakṣatā* is just the property of that *pakṣa*. So in the case of the inferential awareness "the hill is fiery" there is doubt whether there is present the *sādhya* (fire) in the *pakṣa* hill as possessing hillness.

According to Mathurānātha, neither of these two interpretations of the definition of *pakṣatā* as *sādhyasaṃśaya* is correct. As to the first interpretation: if doubt about the presence in the *sādhya* of the qualificand-ness relation be the cause of inferential awareness, then in an instance where there has been no doubt about the presence of fire on a particular hill there can be no inferential awareness of fire on some other hill, since the *sādhya* remains the same, viz. fire limited by fire-ness. Moreover, the definition so interpreted becomes subject to the objection that, in an instance where there is doubt about the presence of the *sādhya* in the *pakṣa* in terms of one property, there should be inference of it in terms of another property. E.g., where doubt about the presence of fire on the hill as being kitchen-fire, there should be inferential awareness of the presence of fire on the hill as being a hill.

As to the second interpretation, if we bank on it the definition of *pakṣatā* will fail to apply in the case there the *pakṣa* is not the hill qualified by hill-ness but the kitchen qualified by hill-ness, since in that case the limiter of the qualificand-ness, hill-ness, will not be present in the kitchen but on the hill. If one has a doubt whether fire is on the hill, hill-ness belonging to the hill becomes *pakṣatā*. But if one wants to infer fire in the kitchen, then hill-ness, the *pakṣatā*, will not be located in the kitchen as the limiter of the qualificand-ness.

Mathurānātha's preferred definition of *pakṣatā*, then, is this: being the *pakṣa* is just being the limiter of the qualificand-ness, i.e., that property which specifies the nature of the *pakṣa*.

Objector: On your account the property of being the *pakṣa* is a property of the limiter of the qualificand-ness, not of the *pakṣa*.

Answer: The *pakṣatā* that is being defined here may not be the property of the *pakṣa*, but that does not cause any harm, because this *pakṣatā* is not the limiter of the denoted-ness of a term (*pravṛttinimitta, śakyatāvacchedaka*). Jar-ness is the limiter of the denoted-ness of the term "jar". If *pakṣatā* were the limiter of the denotedness of the term "*pakṣa*" it would be a property of the *pakṣa*, but that is not the case here, for the term "*pakṣatā*" is used here in a technical sense as a cause of an inferential conclusion. *Pakṣatā* as the limiter of the denoted-ness of the term "*pakṣa*" is the designated-ness (*uddeśyatva*) of the inferential conclusion: it is *this pakṣatā* that is a property of the *pakṣa*.

Pakṣatā as cause and inferential conclusion as effect co-exist in the same locus, namely the limiter of the qualificand-ness. *Pakṣatā* as the possessor of the property of being the subject of doubt is the cause (in terms of the relation of being the limiter of the qualificand-ness) of the effect--the inferential conclusion (in terms of the same relation).

Objection: However, if such a cause-effect relation is introduced, there is the difficulty that, in the case of an inference "there is fire on this hill", there will be lack of collocated-ness between the cause and the effect (since here being on this hill is the *sādhya* and fire the *pakṣa*; there being on this hill is the cause of being fire, and that--being on this hill--is not doubted). So only an inferential conclusion whose limiter of the qualificand-ness is the *pakṣa* is to be admitted as *pakṣatā*.

Answer: Does this doubt (in the case being excluded) have relation to the particular person concerned (*tattatpuruṣīyatva*) as its qualifier, or not? If it does, then this *pakṣatā*, being the cause of the inferential conclusion, is not the immediate antecedent of the conclusion, since several steps intervene--first doubt whether the *sādhya* is in the *pakṣa*, then perception of the *hetu*, then consideration, and only after all that does the conclusion become cognized. Thus the relation to that person cannot exist immediately before the conclusion, as no awareness lasts for more than two moments. (This point is raised in Gaṅgeśa's text.) On the other hand, if the relation of the doubt to the particular person concerned is not a causal factor (but merely an indicator), then an inferential conclusion might occur even when one has certainty (rather than doubt) about the *pakṣa*'s having the *sādhya*, and the doubt was specified in order to exclude this situation.

Objector: Well, it is (not relation to the particular person concerned, but) eligibility for doubt about the *sādhya*'s being in the *pakṣa* that is the *pakṣatā*. Thus if there is certainty about the *sādhya*'s being in the *pakṣa* there can be no inference, and if there is certainty about the sublation (i.e., the absence of the *sādhya* in the *pakṣa*) then also there will be no inference. Therefore *pakṣatā* as doubt about the thing inferred is the cause of the inferential conclusion.

Question: Is fitness for doubt the concurrent absence of both certainty and the ascertainment of the absence of the *sādhya* in the *pakṣa*, or the absences of both certainty and that ascertainment? If the first, then if only one of the two is present a conclusion may still follow, whereas if the second, this possibility is excluded. But another objection arises if the second is the case: if ascertainment of sublation is an obstructor to any qualified awareness, then there is no possibility of any cognition of any sort here. So absence of certainty alone should be regarded as fitness for doubt, and thus the sublation is superfluous.

(E85-88) Objection: Fitness for doubt alone cannot be regarded as the *pakṣatā*, for in scriptural statements such as "the self that is seen should be heard, thought about and ascertained" (*"ātmā vā are draṣṭavyo, śrotavyo, mantavyo nididhyāsitavyaḥ"*) one is advised to draw an inferential conclusion in spite of there being verbal certainty. It has been advised that there should be inference by a different *hetu* after there has an inferential conclusion has been drawn from one *hetu*. Thus there is the admission that an inferential conclusion can be drawn despite inferential certainty.

Therefore that *pakṣatā* is (corresponding to (3) of our summary, Volume 6, Gaṅgeśa's text) (3) the desire to infer (*siṣādhayiṣā*) that the *pakṣa* has the *hetu*, and it is that which is the cause of the inferential conclusion in all cases. It has then been said in the scriptural statement quoted above that self-realization takes place through three ways, so there is desire to infer in spite of verbal certainty.

This definition has an additional advantage, in that it removes the contradiction between the two statements of Vācaspati Miśra that (a) "The logicians desire to know even perceived things by means of inference" and (b) "Nobody knows by inference that an elephant that has been perceived".

Answer: But this definition has several defects.

(i) Since desire to infer lasts only for two moments,

it does not remain up to the time of the conclusion, and as such cannot be the cause of that conclusion.

(ii) A cause is that in the absence of which the effect cannot come into being; but even in the absence of desire to infer there can be an inferential conclusion if causes like the perception of the *hetu*, recollection of the relation of concomitance, etc. are present. This is testified to by experience. Hence desire to infer is only an accidental condition. Even in the absence of an awareness that inferring is a means to a desired end (*iṣṭasādhanatājñāna*), which produces a desire to infer, one still may infer that, e.g., the enemy has ill-gotten gains and, unfortunately, must be fought.

(iii) In the case of inferring clouds on hearing thunder, the desire to infer becomes dispensable (*anyathāsiddha*).

Because of these difficulties in (3) some define *pakṣatā* as fitness to be something one desires to infer. But this definition is not acceptable, since is cannot be determined.

(Gaṅgeśa's account is (as summarized in Volume Six):) The *pakṣa* is that with respect to which there is absence of an instrument of knowledge of the presence of the *sādhya*, or which, even if we have such knowledge, we may still desire to infer.

This definition is explained. It follows that there is *pakṣatā* in precisely three cases: (1) when one has desire to infer alone (that is, one has the desire and the conclusion has not been ascertained to be the case); (2) when one has the desire and it is already known to be the case; (3) where one does not know it to be the case and one does not desire to infer it. What the definition excludes is (4) the case where one knows it to be the case and has no desire to infer it.)

(E89-91) Mathurānātha: *Pakṣatā* as the cause of inferential conclusion consists in being, through self-linking connector, the locus of the absence of (4)'s being the case, the counterpositive-ness of which absence is limited by inherence.

In this sense, *pakṣatā* is not the limiter of the property of being denoted by the term "*pakṣa*", so there is no harm if this *pakṣatā* becomes a property (of the thing being inferred).

It should be mentioned here that the limiter of the denoted-ness is not the term "*pakṣa*" but, according to Mathurānātha, the *pakṣatā* defined here is the cause of inferential conclusion, while the limiter of the denoted-ness of "*pakṣa*" is the subject-hood (*uddeśyatva*) of the inferential conclusion.

Objection: Suppose there is, at first, doubt about the *sādhya*, next there is consideration, and then there is perception of the *sādhya*. In such a case there is absence of (4)'s being the case plus inherence but as a matter of fact no inferential conclusion results in such a case.

Answer: When a thing becomes the object of both perceptual and inferential awareness the totality of causal factors of perception becomes an obstructor to inferential cognition.

(E91-95) In conclusion, Mathurānātha states and refutes the Prābhākara Mīmāṃsā view that *pakṣatā* is not the cause of an inferential conclusion. According to the Prābhākaras, as in the case of perception, so also in the case of inference, there can be incessant consecutive awarenesses of the same thing (*dhārāhijñāna*). However, despite this, there can be no inferential conclusion after the first one because of the presence of certainty. Hence *pakṣatā* cannot be regarded as the cause of inferential conclusion. Rather, the cause of inferential conclusion is awareness of pervasion, etc. in the presence of which there is inference in spite of the absence of *pakṣatā*. The Nyāya view violates the law of parsimony and is subject to the defect of the heaviness of presumption.

To this Mathurānātha replies by saying that incessant consecutive cognition of the same thing is inadmissible, because in the presence of causes such as sense-object contact, etc. there can be consecutive perception all right, but there can be no consecutive inferring due to the absence of consideration subsequent to the first inference, since every awareness last for only two moments.

Those who say that inference has as its cause consideration as well as the absence of the awareness of the invalidity in the consideration will also have to admit that the consideration in question must contain the awareness of the *sādhya* as the cause of the inferential conclusion, for otherwise there would arise the question of admitting the occurrence of inference in the presence of such awareness of invalidity. Thus the Prābhākara view involves the defect of heaviness of presuppositions (*mahāgauravadoṣa*).

(In this context, it may be mentioned that Raghunātha Śiromani also has referred to the Prābhākara view on *pakṣatā*, but he has not refuted it; whereas Mathurānātha has both stated and refuted the Prābhākara view and has established,

with adequate reasons, the cause-effect relation between *pakṣatā* and inference.)

63.259.2.14. *Kevalānvayin*

63.259.2.15. *Kevalavyatirekin*

63.259.2.16. *Parāmarśa*

Summary by Madhusudana Nyayacarya

This summary was written for this Encyclopedia by Madhusudana Nyayacarya in Sanskrit and has been translated here by Sibajiban Bhattacharyya.

An author usually writes many books. Objects established in a prior book must be consistent with the account of a topic given in a later book by the same author. Mathurānātha first wrote a book on *pakṣatā* and later wrote a book on *parāmarśa* (consideration). Now they both have the same subject, inference. *Pakṣatā* is conducive to inference just as much as *parāmarśa*. So the consistency relation (*saṅgati*) here is being conducive to one effect. Thus, after determining *pakṣatā*, when Mathurānātha determines *parāmarśa* as being the relation of consistency of the later work with the former work, there is conduciveness to one effect.

Consideration may be explained by an example:

(i) The hill possesses smoke.
(ii) Smoke is pervaded by fire.
(iii) The hill possesses smoke pervaded by fire (consideration).
(iv) Therefore the hill possesses fire.

According to traditional Western logic, in a syllogism the conclusion follows necessarily from the premises taken together. By "taking together" the Western logicians mean the conjunction of the two premises. But Navya-Nyāya philosophers do not regard the conjunction of premises as necessary for the drawing of a conclusion. They combine the two premises cognized with certainty into a more complex form of cognition, which is technically called "a qualified construction-filled cognition." This is consideration.

Navya-Nyāya philosophers make a distinction between the subject and predicate of a construction-filled cognition and the qualificand/qualifier analysis. Thus we have two forms of the conclusion. Where the hill is the qualificand and fire is the qualifier, the conclusion is

(a) The hill possesses fire.

In the conclusion of the second form of inference

(b) There is fire on the hill,

fire is the qualificand and the hill is the qualifier. Yet in both cases fire is the inferred object, (the *sādhya*) which is the predicate of the conclusion. So whether fire is the qualificand or the qualifier, it remains the predicate in both (a) and (b).

Now as consideration is a cause of the inference which is the effect, there must be the limiting property of cause-ness resident in the cause and also the limiting property of effect-ness resident in the effect. Consideration is the following cognition: The hill possesses smoke pervaded by fire. In this cognition the hill is the locus of the inference (the *pakṣa*). So the limiter of the cause-ness resident in the consideration will be object-hood limited by limiter of locus-ness and this object-hood determines the object-hood limited by pervasion-ness of the *sādhya*. This object which has the object-hood resident in the qualificand (the hill) which is the locus and its pervasion by fire (fire is the *sādhya*) will be cognized with firm belief. So it is the belief which is the consideration. Now this firm belief is the cause of the inference, and this belief may not be cognized as false in a secondary introspective cognition. This characterization of the cause simply as firm belief keeps the possibility open for an objectively false consideration to be the cause of an inference which also must be objectively false but not cognized to be so.

The Mīmāṃsakas argue, as traditional Western logicians do, that inference is caused by the conjunction of two cognitions. But Mathurānātha following Gaṅgeśa argues that it is not necessary to know the specific property of the *hetu*. For in a consideration it is not necessary to know smoke as smoke, but only as pervaded by fire. So the consideration may be of the form

(iii) The hill possesses something pervaded by fire.

From this we may infer

(iv) The hill possesses fire.

We need not have the conjunction of these two cognitions because the something in the first cognition and the fire in the second cognition may not be one and the same thing. Thus conjunction of two cognitions is not necessary for

inference. This refutes the Mīmāṃsā contention that the conjunction of two cognitions is necessary for inference.

63.259.2.17. *Avayava*

63.259.2.18. *Hetvābhāsa*

III. *Upamāna*

IV. *Śabdakhaṇḍa*

63.260. MATHURĀNĀTHA TARKAVĀGĪŚA, *Māthurī* or *Rahasya* on Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

Only a couple of sections of this work have been published, and most of the manuscripts known to exist of it are confined to portions of Book II.

63.261. MATHURĀNĀTHA TARKAVĀGĪŚA, *Rahasya* on Pakṣadhara's *Tattvacintāmaṇyāloka*

According to Daniel Ingalls (Ingalls p. 26) manuscripts of Book IV of this are "common, Bk. I less so, Bk. II very rare (I find only three fragments)". CSCR 36, pp. 278-279 notes manuscripts of the first book on Perception located in Calcutta.

64. GOVINDACANDRA BHAṬṬĀCĀRYA (CAKRAVARTIN or NYĀYAVĀGĪŚA or MIŚRA) (1655)

This author refers to himself as the son of Nyāyavācaspati. If we interpret this to mean the son of Rudra Nyāyavācaspati, he should have been alive in 1655. Ascription of some of the works in the list below are dubious.

64.262. GOVINDACANDRA BHAṬṬĀCĀRYA, *Ṭīkā* on Raghunātha Śiromaṇi's *Padārthatattvanirūpaṇa*

A manuscript of this work exists in Navadvipa, according to DM, p. 284. (Cf. NCat VI, 194). CSCR 36, pp. 293-294 finds a reasonably good manuscript in Calcutta. Thakur (ODVS p. 336): "The commentator follows Rāmabhadra in a number of places."

64.263. GOVINDACANDRA BHAṬṬĀCĀRYA, *Samāsavāda*

Manuscripts cited at NCat VI, 194 and at CSCR 36, 482ff. It consists of the definition of *samāsa* and it also divides *samāsa* into its species. The work has quotations from the work

of Raghunātha. A manuscript of this work is noted by Balaram Mandal at JASBe 33.3-4, 1991, 62-84.

64.264. GOVINDACANDRA BHAṬṬĀCĀRYA, *Ṭīkā* on Raghunātha Śiromaṇi's *Ātmatattvavivekadīdhiti*

NCat II, 47 provides manuscript citations. However, this work may not be by the same Govindacandra.

64.265. GOVINDACANDRA BHAṬṬĀCĀRYA, *Nyāyarahasya* with *Nyāyasaṃkṣepa* thereon

NCat VI, 207-208 cites a manuscript. Chakravarti describes it as "an elementary treatise of Nyāya based on Gautama's *Nyāyasūtra*, in *kārikās* or verses with a commentary (Chakravarti p. 287).

64.266. GOVINDACANDRA BHAṬṬĀCĀRYA, Commentary on Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

NCat VI, 201 has a manuscript citation.

64.267. GOVINDACANDRA BHAṬṬĀCĀRYA, *Upādhivārttika*

Consult NCat II, p. 382 for manuscript(s) citation(s).

65. RAGHUDEVA NYĀYALAṂKĀRA BHAṬṬĀCĀRYA (1657)

Gopinatha Kaviraj gives us the following information about this Naiyāyika: "Raghudeva lived at Benares....In the Govt. Sanskrit College Library, Benares, there is a manuscript of Raghudeva's commentary on the *Kusumāñjalikārikās* transcribed by Mahādeva Puntamkar in Saṃ 1739 or A.D.1682. Raghudeva was therefore of an earlier date. The 'Decision' of Benares Pandits....contains the signature of Raghudeva. This 'Decision' is dated Saṃvat 1714 (*kṛtakagāvde*) and Śaka 1579 (*nandaśailaśarabhūmitaśake*), that is A.D.1657, which is consequently the exact date of Raghudeva." (GK p. 73. This is referred to and confirmed in UM, p. 445.)

Gopinath Kaviraj (GK p. 73) firmly asserts that Raghudeva was a pupil of Harirāma Tarkavāgīśvara, following Satischandra Vidyabhusana. Dinesh Chandra Bhattacarya names another of Raghudeva's teacher(s) as Cirañjīva, author of a *Vidvanmodataraṅgiṇī*, who identifies himself as the pupil of Bhavānanda Siddhāntavāgīśa (UM p. 444). .

Prajapati pp. 65-84 identifies and gives information on ths author's many works.

65.268. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Ṭippanī* or on Raghunātha Śiromaṇi's *Ākhyātavāda*

An edition exists by N. K. Ramanuja Tatachariar in the Journal of the Tanjore Sarasvati Mahal Library 24.3, 1970 - 25.3, 1971-72. Also consult NCat II, 10.

Prajapati p. 77 gives the beginning and end of a manuscript at "O. I. No. 13988, fol. 37)

65.269. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Anumitiparāmarśavicāra*

See NCat I, 211 for manuscript references. Prajapati (on p. 74) gives the beginning and end of a manuscript at some Oriental Institute No. 1193, Fol. 12.

65.270. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Jñānalakṣaṇavicāra*

NCat VII, 335 refers to manuscripts of a work by this name by one Raghudevabhaṭṭācārya, a disciple of Rāmanātha. It is not clear if this a work by our present author.

65.271. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Sārasaṃgraha* on the *Dravya* chapter of Udayana's *Kiraṇāvalī*

NCat IV, 154 IX, 184 refers to the article in Journal of the Asiatic Society of Bengal 11, 1915, p. 289 as the basis for this ascription. Anantalal Thakur (ODVS p. 357), however, says it is an independent work on the Vaiśeṣika substances with the title *Dravyasārasaṃgraha*.

Prajapati p. 78 gives beginning and end of a manuscript at "O. I. No. 26249, Fol. 94".

65.272. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Vivecana* on Raghunātha Śiromaṇi's *Nañvāda*

Edited by N. K. Ramanuja Tatachariar in the Journal of the Tanjore Sarasvati Mahal Library 24.2 - 25.3. Also cf. NCat VIII, 35. Prajapati pp. 74-75 locates a manuscript at "O. I. No. 1614, Fol. 24)".

65.273. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *(Niścayatva) Niruktiprakāśa*

Umesh Mishra (UM p. 444) says this work, a manuscript of which exists at the Banaras Sarasvati Bhavana Library, No. 334, "is a work on some commentary on the *Āloka*", and provides the first few lines of the Books on perception and inference.

65.274. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA *Vyākhyā* on Udayana's *Nyāyakusumāñjalikārikās*

Gopinath Kaviraj (GK p. 72) found a manuscript dated 1682 in the Government Sanskrit Library at Banaras transcribed by Mahādeva Punataṃkar.

65.275. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Vivecanaprakāśa* on Raghunātha Śiromaṇi's *Padārthatattvanirūpaṇa*

The work was edited by V. P. Dvivedin in The Pandit n.s. 25, 1903 - 36, (1914, which was reprinted as a book from Banaras in 1914, which is our "E". Numbering of sections corresponds to that found in the summary of Raghunātha's work in EnInPh Volume 6, pp. 529-535.

Summary by Gaurinath Sastri

1 (E2) The first line of the text (after the salutation) reads *atha padārthatattvam nirūpyate*. On this, Raghudeva observes that *atha*, which means "then", here means "after settling the definitions of the negative particle *nañ* as having reference to relational and mutual absences", suggesting that Raghunātha must have written this work immediately following his commentary on the *Nañvāda*. The rest of the phrase suggests that the author Raghunātha establishes, on the basis of reasoning, certain categories as to be included, others are refuted, and that some others have a position apart from those admitted by earlier writers.

(E2-3) Space and time do not exist apart from God, since there is no instrument of knowledge to prove it. From "jar is in the eastern direction" all-pervasive-ness, taken as the content of this statement, is itself known as the direction. Similarly all-pervasive-ness taken as the content of the statement "the jar is now" is itself time. All-pervasive-ness is substance-ness which is other than that belonging to objects of limited size. It does not consist of very large size.

Objection: If space and time are not admitted then statements that refer to them cannot be admitted. Besides, if they are included within God then expressions like "now there

is a jar", "then there was a jar" cannot be true, since God is only one.

Answer: Usages of this kind proceed from God himself. After all, those who maintain that space and time are distinct categories of substance recognize only one direction and one time. So God can be taken to be the origin of such expressions.

2 (E3) *Ākāśa* need not be admitted as the inherence cause for sound, as God himself, who is standardly taken as the instrumental cause, may be viewed as the inherence cause as well. The individual self cannot take the place of *ākāśa* (as that cause), as selves are countless. God is taken to be the cause of all products. There will be complexity if the self is also admitted as the inherence cause.

(E3-7) Objection: Sound must have the self as its inherent cause, since sounds arise through contact between self and internal organ. But in that case the awareness of sound becomes mental (rather than auditory). To take the internal organ as the cognizer of sounds is not right, because then sounds could be prevented from being perceived just as traces can be (but the causes of arising are different in the two cases)... So, instead of admitting both many selves and also that God is the inherence cause of sound, it should be held that the one *ākāśa* is the inherence cause of sound.

Answer: No. What prevents a sound from being perceptible is some factor determined by the appropriate property of the self where the mental awareness occurs. No problem arises from that. A particular kind of mental perception must be produced by a distinct quality when it is the content of that kind of perception. Any other kind of mental awareness must be produced by inherence in the internal organ. E.g., this would include the mental awarenesses of traces. But here awareness of traces must be ruled out as the cause. So, some obstruction has to be admitted as capable of preventing the sound from becoming perceptible. Indeed, mental perception cannot be avoided even if one should not admit God as being the material cause of sound, for we should not admit contact of God with an internal organ of a different self. In order to prevent a person from perceiving the awarenesses of others, that person's contact with his internal organ is admitted to be the cause for the rise of his own mental awarenesses (and not those of others).

(E9) If *ākāśa* is not admitted as a separate substance no problem arises. The word "ear" (or "organ of hearing", *śrotra*)

may be taken as God restricted by the cavity of the ear. Inherence in that (God) is the relation involved in the apprehension of sound. Inherence in the ear is not the cause of the awareness of sound, as this is not supported by agreement and difference. There is no justification for holding that perception is necessarily produced by contact with a sense organ. A person living in a particular place will have to be shown to be incapable of experiencing the awareness of sound belonging to another who is in Varanasi. That sound which is limited by a particular ear is the cause of the normal perception of sound of that particular person whose ear it is. The relation that constitutes the kind of perception in question is identity since, in the perception of soundness, the relation between organ and object is identity (they are both *ākāśa*). The relation is not inherence. Therefore there is no harm if sound is not inherent in the ear.

Alternatively, sound need not be admitted to be the limiter in the ear-cavity. Rather, inherence will be the limiter.

3 (E10-11) The internal organ is not a separate substance. Rather, it is a particular non-inherent elemental entity. It was atomic in size in the early school, and is (for us) *bhūta*, i.e., of the form of a *minimum perceptibilium*. Other than that there is no internal organ.

Another reading gives the meaning that the internal organ is a non-inherent material entity. Here the word "material" ("*bhūta*"), which is used in the sense of a substance that moves, is to be taken as referring to a specific moving substance. Taking it as non-inherent is to cling to the Nyāya view that the internal organ is subtle.

Objection: If the internal organ is not admitted two awarenesses can arise at once. According to your (new school) view the internal organ is only the *minimum perceptibilium*, which has large (rather than atomic) size. So, since many contacts are possible between a large internal organ and a self there can be many awarenesses at once. But this controverts Nyāya belief.

Answer: However, the trace that is causally operative in the production of a particular awareness is different from the trace that is operative elsewhere. Those who take the internal organ as a distinct substance will have to admit this in explaining (the Nyāya view that) one awareness arises at a time. A particular unseen (*adṛṣṭa*) trace like merit can explain why only one awareness rises at a time.

Some say that contact with a sense-organ is generally admitted as the cause for the normal perception of a substance, but that the contacts here relate to varying universals. Thus, in order to exclude the perception of a self which is not related to the sense-organ that is in contact, internal perception must be excluded from being the cause of the mental perception of the self. If the internal organ is not admitted as a distinct substance then the rise of several awarenesses at once cannot be prevented even by admitting several *minima perceptibilia*. Raghudeva here seems to convey his disagreement with Raghunātha's view, saying that a causal relation of some sort must be admitted in retaining the internal organ, and that he has treated the matter at length in his (247) *Niruktiprakāśikā*.

4 (E11-15) The *minimum perceptibilium* and its color can be satisfactorily appealed to in explaining the perception of a substance. Contact of that with the visual organ can be admitted on grounds of simplicity to explain the ocular perception of substances.

Objection: When air is in contact with the visual organ, since what one perceives is absence of color, no such contact is possible. So contact between the object and the eye cannot be sufficient.

Answer: It is all right to distinguish the relation involved in cases of absences from the contact involved in the case of positive entities.

5 (E16-17) Objection: The large size of the self will have to be taken into account as supporting the atom and dyad. Otherwise, if large size is admitted to be the cause of perceptibility in order to avoid atoms becoming perceptible, then this middle term (large-sized-ness) will have deviation in the case of the contact between the self and the internal organ (since the internal organ is not large). Ocularity and tactile-ness will then have to be admitted as giving rise to the perception of things other than the self, and this leads to over-complexity.

Answer: Tactile-ness of a *minimum perceptibilium* can be ruled out, since the object and the organ can be assumed to be of the same size (when we touch something a *minimum perceptibilium* of our finger touches a *minimum perceptibilium* in the object.) And large-ness, or large size, can be involved in a cause through inherence in the smaller things (such as the *minimum perceptibilium*). However, this occurs only in the case of visual perception. So there is no deviation (from our contention) even if the *minimum perceptibilium* is admitted to have touch, since that can only happen when the substance is moving. The self cannot move, and so contact between self and internal organ should not be brought in here. And in the cases of visual perception of air and of a jar, or of the sky and a jar, the sky being not perceptible, there is no problem about either ocularity or tactile-ness. But in the case of contact between visual organ and jar, or between the visual ray and jar, ocularity and tactile-ness are admitted to prevent ocular and tactile perceptions. The Vaiśeṣikas do not admit "cooking" in the production of a composite whole. So there is no necessity for supposing the absence of color in such a whole. So large size can be admitted to have the same attributes in all cases, and color and touch are not admitted as causes in ocular and tactile perceptions respectively.

(E18-19) Since the distinction between small and large size now plays no part in the new theory there is no need to attribute large size (or any size) to the self.

(E19-21) Being a substance is not conducive to having size, although being a *minimum perceptibilium* is. The old school admits colors and other qualities which are beyond a sense-organ, as e.g., color is in the case if the nose, whereas earth, etc. must have color. But if they are right the nose, too, has color-ness and possesses size and so must be perceptible. So, to avoid this outcome, manifested color-ness should not be accepted as a proper universal. Manifested-ness is not varied, as it is not found in cases of blue-ness, white-ness, etc.

(E21) Internal heat is not admitted in the olfactory sense-organ.

6 (E24-25) Manifested-ness (*udbhūtatva*) is admitted to be a universal, but non-manifested-ness (*anudbhūtatva*) is not.

7 (E25-26) Being material (i.e., being of limited size) (*mūrtatva*) is a universal which limits the inherent cause of throbbing (*spanda*). If this is not admitted, then throbbing will have to be admitted even in the sky and the self. Actually, striking and pushing are not admitted as non-inherence causes in the sky, etc. Since air is not admitted to be perceptible and color is taken as the cause for the perception of all substances except the sky, an over-complexity arises. This can be avoided by taking being of limited size as a universal, since being elemental is one also.

8 (E28-29) Separateness is not a distinct quality from the others, since reference to separateness can be analyzed through

us of mutual absences.

9 (E29-30) Likewise farness and nearness are not separate qualities, as the text states.

10 (E30-31) Nor is individuator a separate category. Even without an individuator an eternal substance can differ from another by itself.

11 (E33-34) Raghudeva defends variegated color against Raghunātha's rejection of it. The colors that are found in a jar that is said to be variegated in color are produced by the parts, each of which has a different color. These colors must be non-locus-pervading. Without the theory of variegated color a jar which is multicolored, involving (say) six different colors, one has to assume six qualities, each being the cause of its own variegated color. This is a heavy, i.e., complex, theory. By admitting variegated color one merely has to show that the absence of all colors other than variegated color is the cause of the jar's color, and that in the case of an entirely blue jar, let us say, variegated color is not present, only blue. This is a simpler theory. Similarly, variegated touch should also be admitted. Raghudeva says that more on this is to be found in the *Citrarūpavicāra*.

14 (E50) Raghudeva clearly says that both being present and being absent are indivisible imposed properties (*akhandopādhi*).

(E51) Actually, any feature that exists in an eternal object is the limiter of any effect. Mere existence (*sattā*) limits a substantial effect. But being produced (*janyatva*) limits any such effect through inhering in it, and so one or the other is unnecessary to avoid over-complexity. Thus being produced leads to heaviness and should be expunged, since existence is already proved to exist through an instrument of knowledge. Further details are to be found in the author's (lost?) *Sattājātivicāra*.

16 (E51-53) Since Raghunātha reduces the four all-pervading substances (spatial direction, time, selves and *ākāśa*) to just selves (including God) it can be concluded that all-pervasive-ness is a common property of selves.

25 (E71-74) Causality is an independent category. The Navyanyāya analysis of causality, as that which immediately precedes the effect, is invariably coexistent with the effect and which is indispensable (*ananyathāsiddha*), is rejected on the ground that it does not apply to cases of disjunction and absence of obstructions, where none of the five accounts of indispensability apply. Yet Raghunātha's conclusion is not required. Raghudeva suggests indispensability can be treated as that self-linking connector which is a limiter of causality.

26 (E74) A similar analysis is suggested for effect-ness

28 (E76) If there is only one inherence then the inherence of smell in earth and that of viscidity in water are the same thing, the one inherence. So water could smell!

Objection: Water does not have inherence qualified by being correlated with smell, and thus no awareness of smell arises there.

Answer: This is no argument, since being qualified is also in both earth and water. So, if the loci of the cases of inherence are different, what harm is there in admitting inherences as many?

65.276. RAGHUDEVA NYĀYĀLAMKĀRA BHAṬṬĀCĀRYA, *Gūḍhārthadīpikā or Raghudevī* on Gaṅgeśa's *Tattvacintāmaṇi*

NCat VIII, 24-25 provides many citations. CSCR 36, p. 188 gives two other titles, *Tattvadīpikā* and *Niruktiprakāśa*, although the latter seems rather to have been a commentary on Pakṣadhara's *Āloka*.

65.277 RAGHUDEVA NYĀYĀLAMKĀRA BHAṬṬĀCĀRYA, *Ṭīkā* or *Navīnanirmāna* on Raghunātha Śiromani's *Tattvacintāmaṇidīdhiti*

NCat VIII, 25 says the work by the second title is "probably a revision" of the first and written after that (Chakravarti p. 288).

65.278. RAGHUDEVA NYĀYĀLAMKĀRA BHAṬṬĀCĀRYA, *Vyākhyā* on Kaṇāda's *Vaiśeṣikasūtras*

Manuscript at Gokul Giri, Banaras.

65.279. RAGHUDEVA NYĀYĀLAMKĀRA BHAṬṬĀCĀRYA, *Bhūṣāmaṇi* on Śrīharṣa's *Khaṇḍanakhaṇḍanakhādya*

This work has been published in Chowkhamba Sanskrit Series 82, 1936

65.280. RAGHUDEVA NYĀYĀLAMKĀRA BHAṬṬĀCĀRYA, *Vākyavāda*

This work has been edited. However, it does not appear in Prajapati's list.

65.281. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Viṣayatāvicāra* or *-vāda*

Prajapati p. 79 gives the beginning and end of a manuscript cited as "O. I. No. 233163, Fol. 23). There apparently is some confusion of this work with the work of the same title by Harirāma Tarkavāgīśa (cf. above, #211). Prajapati is convinced they are distinct works; cf. p. 80

65.282. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Viśiṣṭavaiśiṣṭyavicāra* or *-vāda*

Manuscript cited in BudCat II, p. 196. Prajapati p. 76 finds a manuscript (Vedic Samshodhana Mandal, Pune, No. 11886 Fol. 25), gives beginning and end.

65.283. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Pratiyogijñānakaraṇatāvicāra*

Manuscripts are cited at NCat 12, p. 261b. Prajapati p. 78 gives thebeginning and end of a manuscript at the Oriental Institute Library, Mysore (No. P.4021/3)

65.284. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA *Sāmagrīvāda*

Cf. CSCR 20, 6. Prajapati p. 76 locates a manuscript (BORI, No. 260, 1899-1915, Fol. 14), gives the beginning and end.

65.285. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA *Īśvaravāda(rahasya)*

Identified as #1126 and #714 in CSCR 20, pp. 23-24, 27-28, based on manuscript references at NCat 2, p. 278a. Prajapati, pp. 73-74, gives the beginning and end of a manuscript found at an Oriental Institute (not clear whether Baroda or Mysore, but No. 26251, Fol. 5).

65.286 RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Citrarūpavicāra*

A lost work referred to by its author (cf. above, p. 564, section 14).

65.287. RAGHUDEVA NYAYĀLAMKĀRA BHAṬṬACĀRYA, *Avayavagrantha*

Nothing is known to us about this work except its title.

65.288. RAGHUDEVA NYĀYĀLAMKĀRA BHAṬṬĀCĀRYA, *Ākāṃkṣavādārtha*

Prajapati gives the beginning and end of a manuscript located at the Vedic Samshodhana Mandal, Pune No. 11927, Fol. 23.

65.289. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Upasargadyotakatvavicāra*

We are at the moment unaware of any manuscript citations.

65.290. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Kāraṇavādārtha*

Consult NCat 3, 379 for possible manuscript citations.

65.291. RAGHUDEVA NYAYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Kāryakāraṇabhāvavicāra*

See NCat 4, 9 for possible manuscripts of this work.

65.292. RAGHUDEVA NYAYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Jñānadvayavicāra*

NCat 7, 326 may contains references to manuscripts of this work.

65.293. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Tarkavicāra*

Prajapati p. 78 locates a manuscript at BORI No. 180 of 1899-1915, Fol. 4.

65.294. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Daṇḍakāraṇatāvicāra*

Manuscript cited at NCat 8, 304.

65.295. RAGHUDEVA NYĀYĀLAMKĀRA BHAṬṬACĀRYA, *Dharmitāvacchedakapratyāsattinirūpaṇa*

Manuscript cited at NCat 9, 279.

65.296. RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Pakṣatāvāda*

Manuscript cited in NCat 11, 2.

65.297. RAGHUDEVA NYĀYALAMKĀRA BHAṬṬĀCĀRYA, *Manovāda*

We are not certain about the location of any manuscript of this work.

65.298 RAGHUDEVA NYAYĀLAMKĀRA BHAṬṬĀCĀRYA, *Lakṣaṇavāda*

Likewise, unclear.

65.299 RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Laukikaviṣayatāvāda* or *-vicāra*

Prajapati p. 75 gives the beginning and end, based on a manuscript identified as "O. I. No. 26491, Fol. 6)

65.300 RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Navīnanirmāṇa*

Prajapati p. 77 gives beginning of an incomplete manuscript located at Ranvir Manuscript Pustakalaya, Jammu.

65.301 RAGHUDEVA NYAYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Muktivāda*

Prajapati, pp. 72-73, finds a manuscript at the Baroda Oriental Institute (No. 9135, Fol. 12) and gives its beginning and end. As well, he provides the following description on pp. 81-82:

"Raghudeva discusses the views of some philosophers minutely and tries to give a very perfect definition of *mukti* following the Navya-Nyāya style of defining. In the beginning he quotes the definition of *mukti* as *ātyantikī duḥkhanivṛttir muktiḥ* from the *Nyāyakusumāñjali* of Udayanācarya and then proceeds in discussing each term of the definition in the *padakṛtya* method. Raghudeva thinks that this definition suffers from [a] defect and it cannot be applicable to all cases of emancipation. So each case of emancipation should be defined individually. He suggests that this defect can be removed if *mokṣa* is described as the destruction of final misery (*caramaduḥkhadhvaṃśa*) and 'finality' in the context may be understood as [a] universal inhering in misery. But this definition too is not free from defect and vitiated by cross-division (*saṅkāryadoṣa*).

"Raghudeva next proceeds to discuss the question–is *tattvajñāna* a cause of emancipation? He criticizes the *mukti* concept of Bhātta Mīmāṃsakas. He discusses at length the definition of *mukti* given by Vācaspati Miśra in the *Bhāmatībhāṣya*.

"At the end he discusses the view of his teacher Harirāma who in his *Muktivādavicāra* evaluates the concept of *mukti*."

65.302 RAGHUDEVA NYĀYĀLAṂKĀRA BHAṬṬĀCĀRYA, *Prāgabhāvavicāra*

Prajapati, p. 73, finds a manuscript at the Oriental Research Institute (No. B-1290, Fol. 11), and gives the beginning and end. He also provides the following description:

"*Prāgabhāvavāda* is a *Vādagrantha* dealing particularly with *prāgabhāva* non-existence), one of the four varieties of *abhāva*. Raghudeva does not discuss his predecessors' views about this concept but he tries to examine them presupposing the argument of [a] *purvapakṣa*. He does not discuss even [the] other three types of *abhāvas* in this text....

"In the beginning Raghudeva raises the questions: How does the cognition of *prāgabhāva* occur? By which *pramāṇa* (means of knowledge) [is] the knowledge of *prāgabhāva* comprehended? Like [the] earlier school of Nyāya, Raghudeva argues that if the prior non-existence of a cloth (*paṭa-prāgabhāva*) were not recognized as a special type of non-existence, having no beginning but coming to an end at the moment the cloth comes into being, there will be an absurd result. The same cloth will be produced again and again in an endless series of successive moments. If the prior non-existence of a cloth be recognized as a special type of non-existence forming one of the factors constituting the causal apparatus of the cloth, no such absurd result will arise. One of the causes of the cloth, i.e., its own *prāgabhāva*, ceases to exist at the first moment of the creation of the cloth."

66.PRAHLĀDA KṚṢṆĀCĀRYA (1660)

This author also wrote works on Dvaita Vedānta; see EnInPh Bibliography, #1224.1.

66.303. PRAHLĀDA KṚṢṆACĀRYA, *Tarkadīpāvalī* on Viśvanātha's *Bhāṣāpariccheda*

NCat VIII, 114 gives Mysore I. p. 402 for a manuscript location.

67.304 AUTHOR UNKNOWN (1660), *Maṇikaṇa*

Summary by V. Varadachari

"ET" references are to the edition and translation by E. R. Sreekrishna Sarma, published in the Adyar Libaray Research Centre, 1960.

The author of this work is not known, except for the information that it was written for one Gopālasiṃha. As the title indicates, it seeks to present the contents of the *Tattvacintāmaṇi* in the briefest way possible. The date of the work must be later than 1600 A.D., when Raghunātha Śiromaṇi's reputation should have fairly spread all over the country.

The work is to be treated as having four main sections, each one devoted to one among the four *pramāṇas* admitted in the Nyāya system.

The section on perception contains several topics which are briefly dealt with, including invocation, validity, the Nyāya theory of error (*anyathākhyāti*), relations (*sannikarṣa*), inherence, absences, construction-filled and construction-free perception.

The second section, which deals with inference, discusses pervasion, *tarka, upādhi, pakṣatā, parāmarśa*, only-positive, only-negative, and positive-negative inference, reasoning (*nyāya*), fallacies (*hetvābhāsa*), the inferential argument for God, *śakti*, causality and liberation.

The third section, which is brief, discusses the nature and scope of *upamāna*.

The last section discusses the nature of *śabda* as a *pramāṇa*. It treats of the three causes for verbal cognition, namely expectancy, fitness and contiguity, *tātparya*, the non-eternality of sound, injunction (*vidhi*), *apūrva*, *jāti*, compounds, and *śakti* in the roots and verbal suffixes.

A perusal of the contents of the work proves that this work is faithful to the *Tattvacintāmaṇi*.

(ET2) While discussing *maṅgalavāda* the author refers to the non-completion of the *Kādambarī* by Bāṇa. *Maṅgala* should have an effect in removing the obstacles. If some obstacles arise after the invocation is performed, they will certainly prevent the completion of the work. Or else empirical causes, like lack of facility, may hinder the further progress of the work. This explains why the *Kādambarī* was left incomplete.

(ET28) It is interesting to note that, in a work like this

which is written in the later period, construction-free perception is called "*ālocana*", a word used by early writers such as Praśastapāda.

(ET50) The views of the author of the *Ratnakośa* on *viruddha* and *satpratipakṣa* are noted.

(ET60) Regarding liberation, the author states that the traditional view is that the knowledge of reality is the cause of liberation. The view of Raghunātha Śiromaṇi is stated to be that the destruction of sufferings is caused by the apperception of misery. Knowledge of reality is not the cause. Results of deeds which have not borne fruit are destroyed by the knowledge of reality, while the rest get destroyed by experiencing them. Knowledge of reality is the cause for the destruction of sins which occur immediately after the knowledge of reality is acquired.

(ET62) On the concept of liberation certain views are cited. According to some scholars the removal of the causal body is liberation. Others hold the manifestation of eternal bliss as characterizing the nature of liberation. Still others declare that liberation consists in the disappearance of ignorance.

(ET76-78) The nature of an injunction (*vidhi*) is discussed according to the Nyāya and Mīmāṃsā schools. As regards the result accruing to the performer of a sacred ritual, differences of opinion are entertained by the Mīmāṃsā and Vedānta systems. The result is called "*apūrva*", a word which means not having anything like it before it was produced. It can be rendered as "unique" in English. Or, it can be taken to mean "not produced before by any other act", that is, something peculiar to that act alone. The author notes differences of opinion between the Prābhākara, Bhāṭṭa and Vedānta schools on this matter.

68.RAGHUNĀTHA, son of Jagadīśa (1660)

This author may be identical with the author of a work on Samkhya titled *Sāṃkhyatattvavilāsa*.

68.305. RAGHUNĀTHA, *Nigūḍhārtha* on the *Pakṣatā* section of Gaṅgeśa's *Tattvacintāmaṇi*

Ascription of this work to this writer is found in UM, p. 354.

69. ŚRĪKAṆṬHA or ŚITIKAṆṬHA or NĪLAKAṆṬHA DĪKṢITA (1660)

Various authorities give this author's father's name as Viśvanātha Dīkṣita and his mother's as Kāśī. H. P. Shastri adds that he didn't necessarily live in Banaras, although DM, p. 159 refers to him as "*Vārānasyām mudritā*". Umesh Mishra identifies him as a teacher of Mahādeva Puṇataṃkara, who appears to have lived in the latter part of the seventeenth century, so we can estimate Śrīkaṇṭha's date around 1660.

69.306. ŚRĪKAṆṬHA DĪKṢITA, *(Dīpikā)Tattvaprakāśa* on Janakīnātha's *Nyāyasiddhāntamañjarī*

Consult NCat VIII, 115. CSCR 20, 103 says it has been published.

69.307. ŚRĪKAṆṬHA DĪKṢITA, *Ṭīkā* on Gaṅgeśa's *Tattvacintāmaṇi*

Manuscript locations are known.

69.308. ŚRĪKAṆṬHA DĪKṢITA, *Tattvaprakāśa*

NCat VIII, 50. gives a manuscript citation.

69.309. ŚRĪKAṆṬHA DĪKṢITA, *Tarkaprakāśa* on Annambhaṭṭa's *Tarkasaṃgraha*

CSCR 36, pp. 191-192 cites a tattered and incomplete manuscript of this numbering 1088 stanzas.

70. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN (1660)

This famous writer of myriad Nyāya works was a pupil of Harirāma Tarkavāgīśa and a teacher of Jayarāma Tarkālaṃkāra. NCat identifies him as a "Varendra Brahmin originally of Lakṣmīcapar in the district of Pabna" in Bengal. His father's name was Jīvācārya, and he was a younger contemporary of Jagadīśa. Everyone seems to agree he was born in 1604. (Cf. GK pp. 71-72; UM p. 440ff.; NCat V, p. 295 for information.) Umesh Mishra calls him "the last of the great Navadvīpa scholars". He is generally said to have died in 1709, which would have given him a long life, not unlikely in the light of his prolific number of works. V. P. Bhatta (in the Introduction to his translation of the first Volume of Gadadara's *Vutpattivāda* (Delhi 1990), p. 3 says "He was born in the district of Laksmipasa, Borga, in Eastern Bengal."

Gopinath Kaviraj (GK p. 71) writes about him as follows: "It was Harirāma's dying wish that on his death Gadādhara should succeed him to the professorship in his *Tol*, as otherwise its reputation would not be maintained. Gadādhara readily consented to comply with this last wish of his tutor, and began to teach, but he soon found to his great disappointment that no students cared to come up to him for study; and even the old batch deserted him one by one. His absence of a 'conventional title' of merit was a bar to his real claim to tutorship. However Gadādhara was not a man to allow his spirits to be damped by ths. He left his tutor's place, and founded a school of his own in a delightful little garden on the wayside of the main road leading to the Ganges. Here in the cooling shades of the trees he made his abode. In the absence of any students coming to hear him he would deliver his lectures before the creepers and plants of flowers. Pandits coming to the garden for plucking flowers and passing by it on their way to the Ganges for bathing would often pause to hear him and found his discourses as learned as attractive. Gadādhara's fame thus spread around within a remarkably short period and drew toward him flocks of students from various quarters."

70.310. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Vivṛti* on Raghunātha Śiromaṇi's *Ātmatattvavivekadīdhiti*

The work has been partly edited twice; cf. EnInPh Bibliography #560.1:3, 6. "E" references in Prof. Varadachari's summary below are to the second, the Chowkhamba Sanskrit Series edition of 1940 by Dhundhiraja Sastri.

Summary by V. Varadachari

Gadādhara Bhaṭṭācārya, who passed away in 1709 A.D., was an intellectual giant unmatched for his logical acumen. His penetrating insight into the import of the passages of the *Dīdhiti* is revealed in almost all the passages of the *Vivṛti*. For instance, the text reads "*bhūtoktiḥ sahajā kṛpā*" as the desire for the benefit of others (*parahitecchā*)(p. 7). It is qualified in the text by the word "*nirupadhiḥ*" which means guileless or free from personal interest. Gadādhara writes that the word "*kṛpā*" itself means the impersonal desire to do good and as such, the word "*nirupadhi*" makes no sense and is so redundant. Hence the word "*hita*" is to be taken to mean the cessation of misery and also happiness. One who is filled with sympathy desires to

remove others' pain and also the absence of happiness in others. By the removal of the absence of happiness is meant bringing about happiness. The word "*upadhi*" means pretext and this sense does not suit the context. Hence the author of the *Dīdhiti* takes the word *upadhi* as meaning arranging for one's own benefit (*svahitānusandhānam*). The word "*nirupadhi*" means the reverse of it. Generally, every person, whose sympathy is aroused to go forth and help a person in distress, is activated by his own personal interest in some way or another. By using the word "*sva*" as an attribute to the word "*hita*", the author of the *Dīdhiti* meant that normally what is to one's benefit need not be taken as the result of his going forth to remove the misery on finding it noticed in others. The author of the *Dīdhiti* adds that in the case of God this is possible, because His *kṛpā* is eternal (p. 5).

While interpreting the text regarding objections against the existence of the self, Raghunātha Śiromaṇi discusses briefly the definitions of *kṣaṇikatva, kṣaṇa, utpatti* and other such terms. Gadādhara explains these in detail using the terminology of the Navya-Nyāya school. The discussion of the parts of the passages of the *Dīdhiti* is by itself a dissertation on the topics denoted by those words. It is impossible to offer improvement on the definitions and is much more difficult to render them in understandable English (pp. 16-21).

70.311. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, Commentary on Udayana's *Nyāyakusumāñjali*

NCat V, 295 and 10, 243a give K. 144 as a manuscript citation.

70.312. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Ṭīkā* on Raghunātha Śiromaṇi's *Nañvāda*

This work has been edited (cf. Bibliography #948.5.1). See also CSCR 36, pp. 198-200 for several manuscript citations in Calcutta, which comments: "*Nañ* has been explained to have one of the six kinds of meanings, similarity, etc. But it is parsimonious to admit its two kinds of meanings only, viz. *saṃsargābhāva* and *anyonyābhāva*. So the author has tried to explain all cases of *nañ* in this way.".

70.313. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, Commentary on Gaṅgeśa's *Tattvacintāmaṇi*

Umesh Mishra, p. 442, notes an incomplete manuscript

of the *Anumāna* portion of this as having been in the possession of Professor D. C. Bhattacharya, as noted in that writer's *Vaṅge Navyanyāyacarcā*.

70.314. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Avalokaṭippanī* on Pakṣadhara's *Tattvacintāmaṇyāloka*

See NCat VIII, 40 for manuscript citations. Noted as well in DB, p. 127.

70.315. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Gādādharī* on Raghunātha Śiromaṇi's *Tattvacintāmaṇidīdhiti*

Gadādhara's commentary on Raghunātha's masterwork, in contrast to those of the other two great subcommentators Jagadīśa and Mathurānātha, covers practically the entire work. A large part of it is available in print; a detailed review of which portions are available can be gathered from what follows here.

BOOK ONE: PERCEPTION

70.315.1.1 *Maṅgalavāda*

70.315.1.2 *Prāmāṇyavāda*

Edited a number of times. Our references to sections of the work are based on Jitendranath Mohanty's edition and translation, to be found in his *Gaṅgeśa's Theory of Truth* (Santiniketan 1966; Delhi 1989).

Summary by Jitendranath Mohanty

6-13. Where Raghunātha points out that one cannot take issue with all the Mīmāṃsā schools at once, Gadādhara clarifies this by saying that an attempt to say what all the Mīmāṃsā schools have in common would be quite useless

25. Raghunātha "admits, however, that sometimes from the same conditions, viz. joint predication of opposite properties, there may ensue contradiction". Gadādhara points out that according to the author of the *Dīdhiti* a doubt does not necessarily involve incompatibility of its alternatives. And he tries to show in great detail that on this view doubt need not be indistinguishable from mere joint awareness (*samuccayajñāna*) of the form "S is *p* and *q*". In the case of the doubt "Is there a contact with the monkey in the tree or not?", there is no sense

of incompatibility if the doubter knows that contact with a monkey may exist in one part and may be absent in another. Gadādhara also seems to agree with the view that incompatibility does not always exhibit itself in every doubt as a rule: its manifestation depends upon special circumstances. In the long run, Gadādhara admits that the distinguishing feature of doubt lies in the peculiar nature of its object, i.e., in the particular content-ness (*viṣayatā*) it has, as is evidenced by the introspective judgment "I doubt" which is totally different from "I perceive", etc.

26-29. Gaṅgeśa is arguing that on the Mīmāṃsā theory of intrinsic validity it is not possible to account for the doubt about its truth which may ensue soon after the awareness. The Mīmāṃsaka might answer that just as, even if a person knows for certain that a conch shell is white he may nevertheless due to frustrating circumstances perceive it to be yellow, similarly such circumstances may give rise to doubt about truth even after there has been an initial certainty about its truth. Against this explanation, Gaṅgeśa has two replies. Firstly, where the error is perceptual, only a perceptual certainty to the contrary could serve as its obstruction. In the case of doubt, any certainty would suffice to impede it. If therefore there is certainty about truth by whatever means, there cannot be doubt about the same. Secondly, there is no generic feature called "faultness" (*doṣatva*).

Regarding the first of these points, which undoubtedly is true, Gadādhara adds a qualification. What impedes perceptual error is not mere perceptual certainty, but perceptual certainty derived from the same sense-organ. By this he wants to exclude cases like the certainty, derived from touch, that the pencil dipped in water is straight, which does not exclude visual perception that the same pencil at the same time is bent

BOOK TWO: INFERENCE

70.315.2.1. Inferential Awareness (*anumiti*)

The summary below was written in Sanskrit by Dr. N. S. Ramanuja Tatacharya. It was rendered into English therefrom by V. Varadachari for the purpose of this Volume. This in turn has been revised for style by the Editor. "E" references are to the 1970 reprint of the edition by Vindhyesvara Prasada Dvivedin and Vamacarana Bhattacharyya in Chowkhamba Sanskrit Series 42.

Summary by N. S. Ramanuja Tatachariar

This section is also known as a composition on relevance (*saṅgativāda*).

Three topics are discussed. The first is relevance in the form of the relation of being dependent and depended upon holding between inference and perception. It is then stated that inferential awareness is to be defined as an awareness that is produced by the awareness of the *pakṣa*'s being qualified by the *hetu* which awareness is qualified by pervasion. Inference thus defined is shown to be the efficient cause of inferential awareness. Then inference is proved valid. Thus this section is divided into three parts.

Part I: Proof of Relevance

(E1-6) The substance of the first section is briefly stated. Relevance is shown when something is taken up for study after the treatment of some other thing; otherwise it will not be possible to maintain the relation of prior and posterior between them. That perception and inference form part of a single work and convey a unitary purpose cannot be maintained without showing the connection of relevance between them. That connection therefore lies in the relation of dependent and depended upon. In fact, inference proceeds through dependence on perception, viz. on perceiving the *hetu*. Thus the perception on which an inference depends is the cause and the inference is the effect. This kind of causal relation is available between perception and comparison as well. Comparison (*upamāna*) depends on the perception of, e.g., a *gavaya*'s being similar to a cow. Yet many teachers are agreed upon the precedence of inference over comparison. Thus inference is treated here before comparison.

The author of the *(Pūrva)Mīmāṃsāsūtra* defined a unitary sentence thus: When the words in a sentence have mutual expectancy they constitute a single sentence and convey a unitary sense. Without the specification of expectancy in this definition the two sentences "this is a *ghaṭa*" and "this is a *kalaśa*" would constitute a single meaningful sentence, since they convey the same sense ("*ghaṭa*" and "*kalaśa*" both meaning pot). Lacking expectancy these two sentences do not constitute a single meaningful sentence. Raghunātha, at the outset of his commentary on this section, is concerned to show the relation among the four Books of the *Tattvacintāmaṇi* as being their

mutually conveying a unitary sense even though the four topics they deal with are distinct topics.

(E7-20) Though they are distinct topics, perception and inference, as well as the result of perception and result of inference, are related as what is depended upon and what is dependent. Awareness of pervasion, which is the instrument of knowledge of inference, is the efficient cause of the inferential awareness that results. This awareness of pervasion is in turn produced by the instrument that causes perception, namely a sense-organ. Thus there is the relation of producer and produced between perception and inference. It is therefore natural to take up the study of inference directly subsequent to the treatment of perception.

Still, if the inferential awareness is the result of (the instrument) inference why should it be taken up before inference, as happens here in this Book of the *Tattvacintāmaṇi*? Well, actually either order may occur--one may ask when the effect is known "what is its cause?", or when a cause is known one may ask "what is its effect?". The latter is the case here, for we have just finished a Book on the nature of perception and may relevantly ask "what is its effect?". This leads to the desire to know, i.e., correctly understand, inference. The six kinds of relevance mentioned by Raghunātha are: relevance of scope, the introduction for it, cause, occasion, unitary nature of accomplishment and unitary nature of the effect.

Part II: Definition of Inference

(E21-30) Gaṅgeśa's definition of inferential awareness (D1 in EnInPh Volume 6, p. 170) reads thus: "An inferential awareness is an awareness produced by the awareness that the qualification of the *pakṣa* by the *hetu* (the *pakṣadharmatā*) is qualified by pervasion". The first explanation offered follows the view of "Upādhyāya", that is, Yajñapati Upādhyāya, who interprets this definition to mean that inferential awareness is produced by that awareness which arises about the collocation of the limiters of the pervasion and the *pakṣadharmatā*. The common locus is the *hetu*. The collocation in the stock example is between the pervasion of smoke-possessing-ness by fire-possessing-ness and the *pakṣadharmatā* of this mountain's possessing smoke. Inferential awareness is produced by awareness of that, and so there is connection with the definition.

(E31-36) Yet this interpretation does not actually specify

that this common locus has to be recognized, Gadādhara points out, which it should if D1 is to preclude an erroneous inferential awareness.

(E37-42) Pakṣadhara Miśra held that inferential awareness arises from awareness of the two attributes--viz. pervasion and *pakṣadharmatā*. For the Sanskrit phrase translated in D1 involves a compound term "*vyāptiviśiṣṭapakṣadharma*" which should be construed as a copulative (*dvandva*) compound involving two terms, "*vyāptiviśiṣṭa*" and "*pakṣadharma*". Thus awareness that inference involves both the recognition of qualification by pervasion as well as the qualification of the *pakṣa* by the *hetu* is what is intended by D1, that is, knowledge of those two features gives rise to inferential awareness. But this interpretation of Pakṣadhara's was held by some to be defective, since to interpret that term as copulative does not indicate that the same thing is qualified by both members of the compound.

(E43-47) Thus the term construed as copulative by Pakṣadhara should rather be interpreted as a *karmadhāraya* term. Then the relation expressed in the definition will specify a *pakṣadharmatā* (qualification of the *pakṣa* by the *hetu*) that has pervasion (of the *hetu* by the *sādhya*) as its feature. Thus the definition will have relevance.

Section III: Proof of the Validity of Inference

(E108-110) Materialists deny that inference is an instrument of knowledge. Their argument is that in any inference there is always the possibility that an obstruction (*upādhi*) is present. An obstruction is something of a sort fit to be perceived, the absence of which is then determined by non-perception (*anupalabdhi*) of it. But we cannot be sure that there might not be another kind of obstruction--one not fit to be perceived--which might be present in any case. Thus for any inference a doubt may arise about its deviation, i.e., the absence of pervasion there. Thus inference cannot be an instrument of knowledge. Even if things have been seen together hundreds of times pervasion cannot be assured.

This materialist argument does not, however, hold good. From the fact that some inferences are invalid the materialist is attempting to prove that all inferences are invalid. But this must be an inference itself. So for his own argument to succeed inference must be an instrument of knowledge.

Besides, how do you know about that other kind of

obstruction, the one not fit to be perceived? You must know about it by some other instrument of knowledge than perception--but you deny all such.

70.315.2.2. Five Definitions of Pervasion (*vyāptipañcaka*)

Summary by Madhusudana Nyayacharya with Sibajiban Bhattacharyya

"E" references are to the edition by V. P. Dvivedin and Vamacarana Bhattacarya, Chowkhamba Sanskrit Series 42. This summary is translated from its original Bengali by Sibajiban Bhattacharyya, who provides his own analysis and explanations.

(E141-142) Gadādhara first shows the relevance of this section to the preceding one. Gaṅgeśa undertakes to prove that inference is a means of attaining knowledge and in this connection raises the question how pervasion can be known. But instead of answering this question he starts the examination of the nature of pervasion.

Gadādhara tries to explain how the determination of the nature of pervasion is necessary for the determination of how pervasion is known. It is not enough to point out that the term "pervasion" occurs in the expression "the way of knowing pervasion", and then to argue that therefore the determination of pervasion is necessary for the determination of how pervasion can be known. For it may be that what the term "pervasion" means has nothing to do with the way of knowing pervasion. So it is necessary to show how the way of knowing pervasion is related to pervasion (and not to the word "pervasion").

The term "the way of knowing pervasion" (*vyāptigrāhopāya)* means the cause which produces the awareness of pervasion. According to Gaṅgeśa the cause which produces the awareness of pervasion, for example, that *a* pervades *b*, consists of two factors, one principal and the other auxiliary.

The principal factor is: There must be the awareness that *b* occurs in at least one locus of *a*. This we shall call the awareness of co-presence.

The auxiliary factor is: This awareness of the co-presence of *a* and *b* must be accompanied by the absence of awareness that *b* deviates from *a*. This is the absence of awareness of deviation.

Gaṅgeśa is, therefore, of the opinion that if a person believes that *a* and *b* are co-present in at least one locus, and also does not believe that (or doubts whether) *b* deviates from (occurs in a locus other than) *a*, then he will have the awareness that *a* pervades *b*.

Now Gadādhara shows how these two factors (which produce the awareness of pervasion and hence constitute the way of knowing pervasion) are related to the nature of pervasion. Absence of awareness of deviation is an auxiliary cause of the awareness of pervasion only because awareness of deviation prevents the occurrence of the awareness of pervasion; and this is because the awareness of pervasion involves awareness of non-deviation., i.e., non-deviation is part of the meaning of the term "pervasion". If one has awareness of deviation he cannot also have awareness of non-deviation, for deviation and non-deviation are contradictory to one another. Similarly awareness of co-presence is a cause of the awareness of pervasion simply because pervasion involves this co-presence. Thus Gadādhara says that only because pervasion itself involves the two factors of co-presence and non-deviation can pervasion be known in this way. So the nature of pervasion and the way of knowing pervasion are related in such a way that the way cannot be determined or explained unless the nature of pervasion itself is determined. Hence Gaṅgeśa is right in first examining the nature of pervasion.

(E142) Gaṅgeśa then begins the examination of different definitions of pervasion (D1-5 of p. 171 of EnInPh Volume Six). The first group of five definitions agree in asserting pervasion to be non-deviation. Now these five definitions exhaust all possible ways of defining pervasion as non-deviation, and by rejecting all of them Gaṅgeśa rejects the theory that pervasion is non-deviation. Gadādhara points out that this procedure is logically justified, because if every specification of a generic form is denied, then this amounts to a denial of the generic form itself.

In Nyāya, awareness of pervasion is regarded as the instrumental cause of inferential awareness. Gadādhara points out that if pervasion were the same as non-deviation, then awareness of non-deviation would produce inference. So when Gaṅgeśa rejects the theory that pervasion is non-deviation, he is also rejecting the theory that non-deviation is the object of that awareness which produces inference, i.e., he is asserting

that non-deviation is not the object of the awareness which produces inferential awareness. Gadādhara points out that if we interpret Gaṅgeśa in this way, then the definition of pervasion as non-deviation can apply to relations which appear to be pervasion but are not really so. For when a person makes an invalid inference, mistaking a relation to be pervasion when it is really not so, even then his mistaken awareness of pervasion produces inference, and hence the apparent pervasion also becomes the object of a false awareness which produces inference. If, on the other hand, pervasion is defined as non-deviation, then this definition is not applicable to cases of apparent pervasion, for in such cases there is actually no non-deviation.

DI

(E142-149) D1 (Non-deviation is the non-occurrence of the *hetu* in a locus of absence of the *sādhya*) is rejected because it fails to apply to cases where the *sādhya* is non-locus-pervading.

D2

D2 can be interpreted in two ways by interpreting a compound word occurring in the definition in two ways. The first way of interpreting the compound as a *karmadhāraya* renders the definition defective, hence Raghunātha interprets the compound as *saptamītatpuruṣa*. Let us explain these two interpretations.

Def. 2a. Non-deviation is the absence of occurrence of the *hetu* in a locus where the *sādhya* is absent and which is different from a locus of the *sādhya*.

Def 2a involves the following factors: (a) a locus of the *sādhya*, (b) something different from (a), (c) absence of the *sādhya*, (d) a locus of (c). If we have all these entities, then pervasion is defined as the absence of occurrence of the *hetu* in something which is both (b) and (d). But in this interpretation the definition becomes defective, for the adjectival clause "where the *sādhya* is absent" qualifying "locus" (i.e., (d)) becomes redundant. It is enough if we say that pervasion is absence of occurrence in a locus which is different from every locus of the *sādhya*. This means that pervasion is the absence of the occurrence of the *hetu* in (b). This is because whatever is different from a locus of the *sādhya* is also a locus of the absence of the *sādhya*, i.e., every (b) is also (d). Hence it is redundant to add "where the probandum is absent".

Def. 2b: Non-deviation is the absence of occurrence in what is different from every locus of the *sādhya*.

Def. 2b involves the following factors: (a) a locus of the *sādhya*, (b) something different from (a), (c) an absence of the *sādhya* occurring in (b). If we have all these entities (a), (b) and (c), then pervasion is defined as the absence of occurrence of the *hetu* in any locus of (c).

Now Gadādhara explains why the term "*sādhya*" occurs in (c), i.e., why we may not have, in place of (c), (c*) an absence occurring in (b). It is clear that (c*) is not sufficient, for in the example of smoke and fire we may fix the entities as follows: (a) a locus of fire, say, the kitchen, (b) something different from (a), say, a lake, (c) an absence occurring in (b), say, the absence of *ākāśa*. Now, as *ākāśa* is absent everywhere, the hill is a locus of absence of *ākāśa*, yet smoke occurs on the hill. Hence the definition involving (c*) becomes too narrow. Hence (c) is necessary.

Against this justification of (c) it may be argued that those who accept this definition of pervasion also hold that a difference of the locus of an absence makes the absence itself different. Thus it is not correct to say that the absence of *ākāśa* in the lake (where the lake is the locus of the absence) occurs on the hill, for an absence which occurs in the lake is different from an absence which occurs on the hill. Therefore the hill cannot be taken as a locus of (c*). So there is no harm if smoke occurs there, for the definition of pervasion requires that smoke must not occur in any locus of (c*).

In reply to this Gadādhara points out that the supporters of this definition of pervasion do not accept the general principle that a difference of the locus of an absence automatically makes the absence different.

There is a special type of absence which is changed by a change in its locus, namely, absence of a non-locus-pervading entity. Take, for example, contact with a monkey. If we consider its absence occurring in a tree, we find that both the contact and also its absence are present in the tree. But if we consider its absence occurring in a quality, say, smell, then we find that the contact is only absent in smell (for contact, being a quality, cannot occur in smell, which is another quality). So we have to admit that the absence of contact with monkey occurring in a tree is different from the absence of monkey-contact occurring in a quality. The reason for this is that the

first absence (occurring in a tree) has a peculiarity, namely, it and its counterpositive occur in one and the same locus, a peculiarity the second absence (of monkey-contact in a quality) does not have (monkey-contact does not occurs in smell). Hence absences of this type change with a change in the locus, But in our example, we took that absence of *ākāśa* and this absence does not change with a change in its locus. Thus we can say that the absence of *ākāśa* which occurs in the lake also occurs in the hill, i.e., the hill is a locus of (c*). Hence the original objection against (c*) and the justification of (c) remain valid.

Now Gadādhara suggests another justification for (c). He says: Even if we accept the general principle that every absence is changed if the locus is changed, so that even the absence of *ākāśa* in a lake cannot be present in a hill, still (c) can be justified. But now we have to understand absence in an altogether different way. Usually we understand by an absence of the *sādhya* a negative entity, but absence can be be regarded as that which describes a counterpositive-ness. In an absence of the *sādhya,* the *sādhya* is the counterpositive and its absence describes the (c)-ness resident in the *sādhya*. Thus, the absence is that which possesses the *sādhya* by the relation of being a describer of the (c)-ness. So by "absence of the *sādhya*" we need not mean a negative entity, but something possessing the *sādhya* by the relation of being a describer of the (c)-ness resident in the *sādhya*. In this way we can show that (c*) makes the definition of pervasion impossible. For now the definition becomes

Def. 2b*: Non-deviation is the absence of occurrence of the *hetu* in a locus of everything occurring in something different from every locus of *s*.

To see that Def. 2b* is impossible let us consider the case of smoke and fire. We can regard the lake as something different from a locus of fire (fire is the *sādhya*). But in the lake the property of being a knowable entity is present (i.e., the lake is something knowable), but this property is present everywhere (for, according to Nyāya, everything is knowable), hence it is present in the hill, too, where smoke is present. Thus smoke occurs in a locus (the hill) of knowability which occurs in the lake and the lake is different from every locus of the *sādhya* (here, fire).

Then Gadādhara shows the necessity of various insertions into Def. 2b. "Absence of the *sādhya*" in (c) must mean "absence of that which is limited by the limiter of the *sādhya*-ness and by the limiting relation of the *sādhya*-ness". Again, the relation by which the absence of the *sādhya* should occur in a locus (in (c) we have "an absence of the *sādhya* occurring in (b)") must be the relation which will prevent the awareness that the *sādhya* occurs in a locus by the limiting relation of the *sādhya*-ness. (For various other insertions and also for the reason of the rejection of this definition, see Ingalls.)

D3

(E149-153) D3: Non-deviation is the *hetu*'s not having the same locus as a mutual absence whose counterpositive is a locus of the *sādhya*.

In simple language this means that the *hetu* must be present in a locus which is different from a locus of the *sādhya*. But Raghunātha shows that D3 is too narrow. Instances may be classified into two types on the basis of whether the *sādhya* is one particular entity or many particulars. In some inferences the *sādhya* is one particular entity, as for example in the inference "this is this-color-possessing, because of this taste." Here the *sādhya* is this color, and according to Nyāya qualities like color are as particulars. So this color is a particular entity and can occur in only one substance, the entity designated by "this". In the other type of inference, however, the *sādhya* is not one particular entity but many entities. For example, in the inference "this is fire-possessing, because it is smoke-possessing", fire-possessing is the *sādhya*, and it is not one particular entity, for there are many fires. Now Raghunātha shows that D3 is too narrow because it fails to apply to cases of the second type. If many entities are regarded as the *sādhya* in a particular inference, then these entities will have different loci, just as the kitchen, the hill etc. are the loci of different fires. We can explain why D3 fails to apply to such cases in the following way. Because different fires occur in many loci, we may choose any one locus of fire and say truly that it is different from another locus of fire. Yet smoke may occur even in this locus of the *sādhya* which is different from the first locus of the *sādhya*. Hence D3 fails to apply to cases like smoke and fire, and is therefore too narrow.

Gadādhara points out that D3 fails to apply not merely to cases of the second type, but also to cases of the first type where the *sādhya* is a particular entity. Take, for example, the

pervasion of a particular taste (this taste) by a particular color (this color). To show that the D3 does not apply to this case the method used by Raghunātha cannot be used, for there is only one locus of *s*. Gadādhara adds that there is another way in which we can show that D3 does not apply to cases of this type. The method is this. Suppose a particular entity, A, is the locus of *sādhya*, and the *hetu* occurs in A but does not occur in anything which is different from A. Still, A itself can be regarded as something different from a locus of the *sādhya*. For we can argue that although A is a locus of the *sādhya*, yet it is not a locus of both the *sādhya* and another entity, say B (where B is chosen in such a way that it is absent from A). Hence A is a locus of not-both-the-*sādhya*-and-B and is different from a locus of both-the-*sādhya*-and-B. Now in the difference from a locus of the *sādhya* that figures in D3, we are not given any indication whether difference-from-a-locus-of-both-the-*sādhya*-and-B can or cannot be regarded as difference from a locus of the *sādhya*. For the difference involving the multiple dashes also means a difference (mutual absence) of which the *sādhya* is a counterpositive, although not the only counterpositive since both the *sādhya* and B are counterpositives here. So we can regard A as different from a locus of the *sādhya*, and, as the *hetu* occurs in A, D3 fails to apply to this type of case also.

Now Gadādhara asks why Raghunātha himself says that D3 fails to apply to cases of the second type, while it fails to apply to cases of the first type also. To this Gadādhara's reply is that the reason why D3 fails to apply to cases of the first type is entirely different from the reason for its failure to apply to cases of the second type. The first defect can be remedied simply by asserting that "different from a locus of the *sādhya*" does not mean "different from a locus of both-the-*sādhya*-and-B". That is, we have merely to say that "different from a locus of the *sādhya*" means "different from a locus of the *sādhya* alone". But even if we say this, D3 still fails to apply to cases of the second type. Hence Raghunātha is right in saying that D3 fails to apply to such cases only.

D4

(E154-156) D4: Non-deviation is the *hetu*'s being the counterpositive of an absence which resides in all loci of absence of the *sādhya*.

This definition is unique, because it contains the word "all", which hardly occurs in the technical language of Nyāya. But unfortunately it occurs in a compound word of some complexity and there is uncertainty about what part of the compound is qualified by it. This ambiguity gives rise to four different interpretations of D4. Gadādhara explains them as follows:

D4.1. Non-deviation is the *hetu*'s being the counterpositive of an absence which resides in a locus of all absences of the *sādhya*.

D4.2. Non-deviation is the *hetu*'s being the counterpositive of an absence which resides in all loci of absences of the *sādhya*.

D4.3. Non-deviation is the *hetu*'s being the counterpositive of an absence which resides in a locus of absence of all the *sādhya*

D4.4. Non-deviation is the *hetu*'s being the counterpositive of an absence which resides in all loci of absences of all the *sādhya*.

D4.1 is rejected because there can be no one locus of all absence of the *sādhya* where the *sādhya* is not one particular entity but many entities. (This is explained in Jagadīśa's commentary on the present section.)

D4.2 is rejected because it is too narrow. (Again, explained by Jagadīśa.)

D4.3 is rejected because it is too wide. Take, for example, the invalid case where fire is the *hetu* and smoke is the *sādhya*. Now in this definition "all" is an adjective qualifying only "*sādhya*", not "locus". Hence we can choose a particular locus where every *sādhya* is absent, say, the lake in this example. (A lake is something where all smoke is absent.) And fire is also absent there. Hence the definition applies in this invalid case and thus is too wide.

D4.4 is accepted by Jagadīśa as the correct definition. But Gadādhara rejects D4.4 also. He comments that even if "all" is construed as an adjective of both "locus" and "*sādhya*", still this will not prevent us from regarding an absence of both-the-*sādhya*-and-*B* as an absence of the *sādhya*. So Gadādhara points out that Raghunātha has rejected D4.4 also. (Jagadīśa says that Raghunātha rejects D4.4 not because it is defective, but because a word occurring only once in a sentence cannot be construed twice, thus "all" cannot be construed as an adjective of both "locus" and "*sādhya*". Thus according to Jagadīśa D4.4 violates a rule of grammar but is not logically defective.)

So we come to what is regarded by Gadādhara as the

correct interpretation of D4:

D4.5. Pervasion is the *hetu*'s being the counterpositive of any absence which resides in any locus of absence the counterpositive-ness of which is limited by *sādhya*-ness.

Gadādhara points out that D4.5 is given by Raghunātha himself as the final interpretation of the definition. But even D4.5 is rejected because it fails to apply to cases where the *sādhya* is a particular entity, and hence "all *sādhya*" ceases to have any meaning. (For explanation, see *Jāgadīśī*.)

D5

(E157-160) D5: Non-deviation is the *hetu*'s non-occurrence in what is other than the locus of the *sādhya*.

Here Gadādhara explains the meanings of "other than" and "locus of the *sādhya*" more or less in the fashion of Jagadīśa. He points out that mutual absence (difference) can be meant by expressions containing "not" (as for example "not-pot"), or by expressions containing "other than" (as for example "other than (a) pot"). Just as "not pot"means entities different from all pots, so also "other than (a) pot" means entities different from all pots. So "other than the locus of the *sādhya*" occurring in D5 means entities different from whatever possesses the *sādhya*(-property)...

Now Gadādhara raises a fundamental question. All these (five) definitions of pervasion (D1-5) have been stated in sentences, for nothing can be stated without the use of words or sentences. Yet the awareness, produced by these sentences, of the defining mark of pervasion, is not the awareness of pervasion which is the cause of inference. For the awareness of pervasion which produces inferential awareness is not verbal awareness. The point is that, according to Navya-Nyāya, inferential or perceptual awareness, however complex or complicated it may be, need not involve any word, need not be verbal. This is a fundamental point on which Navya-Nyāya theory differs from the almost universally accepted Western theory. According to Western thinkers language is needed not merely to express thought but also for making thought possible. Even though many do not like to identify thinking with speaking, yet there is near unanimity of views among Western philosophers that higher forms of thinking, like judging, inferring, etc. are not possible without the use of language. Thinking, it is claimed, is impossible without the use of symbols which are mostly linguistic. Now this theory is rejected by

Navya-Nyāya. Nyāya rejects all forms of the image-theory of knowledge. According to Nyāya there can be no such thing as an image in the mind. Hence there cannot be even verbal images (word images). Awareness refers to objects directly, without the mediation of any other entity, image or idea. As a matter of fact, ideas as symbols have been introduced by Western philosophers only to explain the relation of awareness to objects. But the symbols cannot make clearer the nature of this relation; the problem of the relation between awareness and object is merely transformed into that of the relation between the symbol and the object. If a symbol can refer to an object, why not an awareness?

But Nyāya does not deny that there is one type of awareness which is produced by words or sentences. To obtain this type of awareness it is necessary to know the meanings of words and also their interrelation. No non-verbal awareness can be accurately expressed in words, because the hearer will have one type of awareness (verbal), whereas the speaker has another type (non-verbal), and the structures of these two types of awareness are different. Usually the main difference between these two types of awareness lies in the ways in which entities are taken to be related. For example, the sentence "(the) jar (is) blue" produces the awareness that the jar is non-different from (identical with) a blue thing. The relation between the entities meant by the words "jar" and "blue" is non-difference or identity. But if we perceive that the jar is blue, then there are no words involved in this awareness, hence no relation of identity is needed to relate their meaning. Here the relation known is the relation between the blue color and the jar, i.e. inherence. So a person who perceives that the jar is blue (and hence is aware that the blue color inheres in the jar) fails to express his awareness accurately by the sentence "the jar is blue" (which conveys that the jar is identical with the blue thing). No other sentence, either, can express the perceptual awareness accurately. This lack of correspondence between verbal and non-verbal awareness has to be carefully noted.

Now Gadādhara points out that if we construe the sentences expressing D1-5 we shall get one type of awareness (verbal), but this type of awareness will not usually be involved in the production of inference. For inference is produced by awareness of pervasion, usually perceptual awareness, and only occasionally is it derived from sentences. To avoid this difficulty Gadādhara says that after getting the verbal awareness from the

sentence expressing the defining mark of pervasion, we have an introspective awareness of the nature of pervasion. This awareness which is perceptual in nature then produces inference.

All these five definitions of pervasion D1-5 are rejected by Gaṅgeśa as being too narrow. For he says that they do not apply to correct unnegatable inferences. Gaṅgeśa has said "non-deviation is not pervasion, because of absence in unnegatable cases". Gadādhara says "absence in unnegatable cases" means the impossibility of non-pervasion in cases of correct inference with an unnegatable *sādhya*. For if the *sādhya* is unnegatable, every entity is its locus, so there can be no locus of its absence, no locus different from its locus. Hence all these definitions which involve "locus of absence of the *sādhya*" or "locus different from a locus of the *sādhya*" become too narrow.

70.315.2.3 Lion and Tiger Definitions (*siṃhavyāghra*)
Edited in EnInPh Bibliography, #s 788.1.12, 788.1.24, 788.1.26, 788.1.29, 788.1.32 and 788.1.75.

70.315.2.4 Absence Limited by a Property whose Loci are Different from its Counterpositive
(*vyadhikaraṇāvacchinnābhāva*)
Edited in EnInPh Bibliography, #s788.1.20; 788.1.24; 788.1.29.

70.315.2.5 Fourteen More Faulty Definitions of Pervasion
(*caturdaśalakṣaṇa*)
Edited in EnInPh Bibliography #s788.1.20; 788.1.24; 788.1.27;788.1.29; 788.1.41 (part); 788.1.92 of EnInPh Bibliography

70.315.2.6 The Conclusive Definition (*siddhāntalakṣaṇa*)
Edited in EnInPh Bibliography #s 788.1.20; 788.1.11; 788.1.24; 788.1.29; 788.1.29 of EnInPh Bibliography. Translated into French in 788.1.73.

70.315.2.7 General Absence (*sāmānyābhāva*)
Edited in EnInPh Bibliography #s788.1.20; 788.1.24; 788.1.29, and analyzed in 788.1.54.

70.315.2.8 Particular Absence (*viśeṣavyāpti*)
Edited in EnInPh Bibliography #s788.1.20; 788.1.24;

788.1.29.

70.315.2.9 The Means of Grasping Pervasion
(*vyāptigrāhopāya*)
Edited in EnInPh Bibliography #s788.1.20; 788.1.29.

70.315.2.10 Reductio ad Absurdum (*tarka*)
Edited in EnInPh Bibliography #s 788.1.20; 788.1.29.

70.315.2.11 Comprehensiveness of Pervasion
(*vyāptyanugama*)
Edited in EnInPh Bibliography #s788.1.20; 788.1.29.

71.315.2.12 Perception through Connection with the Universal (*sāmānyalakṣaṇa*)
Edited in EnInPh Bibliography #s788.1.20; 788.1.29.

70.315.2.13 On Obstruction (*upādhi*)
Edited in EnInPh Bibliography #788.1.20; 788.1.29. Analyzed and translated into German in EnInPh Bibliography 788.1.66.

70.315.2.14 Being the Pakṣa (*pakṣatā*)
Edited in EnInPh Bibliography #s788.1.9; 788.1.20; 788.1.29; 788.1.89.

70.315.2.15 Consideration (*parāmarśa*)
Edited in EnInPh Bibliography #s788.1.20; 788.1.29.

70.315.2.16 Only-Positive Inference (*kevalānvayin*)
Edited in EnInPh Bibliography #s788.1.20; 788.1.29.

70.315.2.17 Only-Negative Inference (*kevalavyatirekin*)
Edited in EnInPh Bibliography #s788.1.20; 788.1.29.

70.315.2.18 Presumption (*arthāpatti*)
Edited in EnInPh Bibliography #s788.1.20; 788.1.29.

70.315.2.19 Members of an Inference (*avayava*)
(The following summary provides a fuller account of what was missing or underdeveloped in EnInPh Volume Six in connection with this section of Gaṅgeśa's *Tattvacintāmaṇi* and

Raghunātha's *Dīdhiti* thereon.)

Summary by N. S. Ramanuja Tatacarya

Some have defined a *nyāya* as

(D1) an expression indicating the ground of inference that is associated with all the essential features.

These features are:

1. Existence of the *hetu* in the *pakṣa*,
2. Existence of the *hetu* in a locus where the presence of the *sādhya* has been ascertained,
3. Non-existence of the *hetu* in a locus where the absence of the *sādhya* is decidedly known,
4. Unsublatedness of the *hetu*,
5. Absence of any counterbalancing *hetu*.

From the application "*tathā ca ayam*", which means that the *pakṣa* does have the *hetu*-property, one knows the existence of the *hetu* in the *pakṣa*. From the statement of the example arises the awareness of the *hetu* as associated with an invariable relation to the *sādhya*. Invariable relation or pervasion, according to the older school of Nyāya, is the non-occurrence of the *hetu* in what is other than the *sādhya*. In other words, the example shows the absence of the *hetu* in (any) *vipakṣa* and the existence of it in the *sapakṣa*. In the statement of the conclusion (of the inference)--*tasmāt tathā*--the word *tasmāt* conveys that the *hetu* is free from sublation and from any counterbalancing *hetu*.

Objection: The definition of *nyāya* must involve all five members. The present definition (that you have just offered) involves only three, namely (3-5) in the above list, but not to (1) and (2), since they do not give rise to knowledge that the five features are satisfied. Thus the definition is inapplicable.

Answer: Even though (1) and (2) do not serve distinct purposes, nevertheless the awareness of the satisfaction of the five members is what *nyāya* involves. This is shown by the maxim *adhikaṃ tu praviṣṭaḥ cet na taddhanya*, which means that the presence of some extra elements in a group, though not serving the required purpose, does not preclude the possibility of viewing the group as a whole as falling within the scope of a definition.

Nevertheless, the definition given by us above is wrong, since it involves over-extension. Consider

(D2) A *nyāya* is a sentence stating a *hetu* that has the required characteristics (*samastarupapannaliṅgapratipādaka-vākyaṃ nyāyaḥ*).

The expression "has the required characteristics" does not form part of an inference as the thesis, reason, etc. do. But since it applies to the any awareness that the *hetu* is associated with all the required characteristics, D2 will be applicable to it. And this is a clear case of over-extension

Gaṅgeśa therefore gives another definition:

(D3) A *nyāya* is a sentence which gives to us a verbal awareness that is useful in giving rise to that consideration of the reason which is the cause *par excellence* of an inferential awareness.

(D3) may be explained as follows: there arises either a group-cognition or a complex awareness on hearing a sentence. This serves as an aid to the arising of the consideration of the reason. From this there arises inferential awareness. The group-cognition is of the following form:

1. The mountain is identical with that which has fire..
2. Awareness of smoke has the characteristic of being an indicating factor.
3. What has smoke = what possesses fire that pervades smoke.
4. The mountain is that which possesses smoke that is pervaded by fire.
5. The mountain is identical with that which possesses fire that is indicated by that awareness of smoke which is free from sublation or any counterbalancing *hetu*.

A complex cognition is of the following form:

The mountain is identical with that which possess smoke that is pervaded by fire; the latter is identical with that which possesses smoke; this one is identical with that which possesses fire that is pervasive of smoke; this again is identical with the mountain that possesses fire which is indicated by the awareness of smoke; and such a mountain is identical with a mountain that possesses fire which is indicated by the awareness of smoke that is free from sublation or any counterbalancing *hetu*.

Either the group-cognition or the complex cognition serves as an auxiliary cause generating the consideration of the reason that leads to inferential awareness. It comes to this:

1. The instrument of inferential awareness is consideration of the reason.
2. The latter is caused by the self.

3. The self is aided by the verbal awareness of a group-cognition or a complex cognition

4. The latter is caused by the five-membered argument form, and

5. It is called "*nyāya*".

Raghunātha feels some difficulty in the above definition. It is said that the verbal awareness that arises from *nyāya* is *useful* in giving rise to consideration of the reason. He wonders whether this usefulness lies in presenting the categories that serve as objects of the consideration or is merely facilitating the rise of the consideration. If the first view is held, then the definition of *nyāya* will be applicable only to the third and fourth members of an inference, as these two alone present the categories that form objects of the consideration. If the second view is held, then even a question like "which is the one that possesses fire and why?" will have to be viewed as coming under the scope of the definition of *nyāya*, since it gives rise to the desire to know and through that prompt one to formulate an inferential expression. Hence Raghunātha amends the definition as follows:

(D4) Being a *nyāya* is having the five members--thesis, etc.--presented in their proper order.

Definition of "Member" (of an Inference) (*avayava*)

Gaṅgeśa in the *Tattvacintāmaṇi* defines "member of an argument" (*avayava*) as a sentence that gives rise to a verbal awareness which eventually gives rise to a(nother) verbal awareness that leads to a consideration that is the instrument of inferential awareness. From each of the five members of an argument there arises an individual verbal awareness. And the five verbal awarenesses together give rise to an integrated verbal awareness which in turn gives rise to consideration, and from the latter there arises inferential awareness.

Raghunātha defines an argument as a sentence which forms part of *nyāya* and which involves a thesis, etc.

Definition of "Thesis" (*pratijñā*)

Gautama in the *Nyāyasūtras* defines *pratijñā* as a sentence that signifies the *sādhya*. Gaṅgeśa rejects this definition on the ground that it is over-extensive through covering expressions such as "*sādhya*", "fire" and the like, as these expressions too convey the *sādhya*. Raghunātha, however, substantiates Gautama's definition in this fashion: The word

"*sādhya*" in the *(Nyāya)sūtra* definition does not stand for the *sādhya*, that is, it does not function to convey the adjectival feature in an inferential awareness. Rather, it conveys the sense of that which is associated with the *sādhya*. This sense is arrived at on the basis of the etymological derivation of the word "*sādhya*" as that wherein something is sought to be established.

The word "signifies" (*nirdeśa*)" (in the definition) stands for something that is capable of giving rise to verbal awareness. Thus a thesis is the member of an argument capable of giving rise to the complex-cognition of the *sādhya* that is sought to be established as related to the *pakṣa*.

Raghunātha offers another definition of "thesis" which may be explained as follows: According to tradition, in the case of inferential awareness which involves reference to a mountain as limited by mountain-ness as the *pakṣa* and fire as limited by fire-ness as the *sādhya*, the sentence expressing the thesis has the form "the mountain has fire". This sentence gives rise to a verbal awareness wherein the *pakṣa* is the mountain, the *sādhya* is possessing fire, and the relational feature is identity between the two. The doubt that cannot be dispelled by this verbal awareness is whether this floor has a pot on it, and an awareness that does not dispel this doubt has the form "this mountain, through the relation of identity, is the one that is possessed of fire", "this mountain has fire". And this sentence is a statement of a thesis.

Gaṅgeśa sets forth two more definitions of a thesis.

(D5) A sentence which gives rise to the desire to know the *hetu* on the basis of which something is predicated of the *pakṣa* and which thereby leads one to use a sentence that states the reason is the thesis.

(D6) A sentence that gives rise to the verbal awareness that does not involve reference to the reason and which has as its content something that possesses the *hetu* expresses a thesis.

Definition of "Reason" (*hetu*)

When it is suggested that something possesses a particular property the expectancy arises concerning what precisely is the reason for the suggestion. Thus it becomes necessary to set forth the reason in the form of a sentence.

According to Nyāya a word is something significative of a sense. And a group of words constitutes a sentence. When viewed in this light, the expression "because of smoke (*dhumāt*) is a sentence. It consists of the stem *dhuma* plus the fifth case-

ending. Both are significative of their respective senses. The stem *dhuma* conveys the sense of smoke and the case-ending conveys the sense of being a cause. Thus both are words and the expression "*dhumāt*", being a group of words, is a sentence.

The sentence "*dhumāt*" contains a case-ending that is significative of the sense of being a cause or ground. It gives a verbal awareness that does not involve reference to the *sādhya*, the thing to be established, and it eventually leads to the rise of that expectancy which is the instrumental cause of inferential awareness. Thus the reason (*hetuvākya*) is defined as that

(1) which consists of the case-ending that is capable of conveying the sense of being the cause,

(2) which gives rise to a verbal awareness that does not involve any reference to any *sādhya*,

(3) which eventually leads to the rise of expectancy, the instrumental cause of verbal awareness.

(2) is intended to preclude the charge of over-extension of the definition to cover the sentence expressing the thesis (*pratijñāvākya)*, from which there of course arises an awareness that has the *sādhya* as its content. (1) is intended to preclude over-extension of the definition to the third member (the example, *udāharana*) in the following way: In the inferential argument "This one has not come into existence from a stick, because it has the property of being a substance that is not caused by contact with a stick", the third member has the form "that which has been produced by a stick is free from the property of being a substance that is not caused by contact with a stick." This sentence produces an awareness that does not involve reference to the *sādhya*, namely, the absence of being produced by a stick. And, it has the expression *dandāt* involving the fifth case-ending or ablative, which is standardly used to express a cause. So an objector may well charge that the definition (without (3)) over-extends. But that objection is avoided by the provision of (1). From the expression "by a stick" in the formulation of the third member above there arises the awareness of its sense as associated with the sense of the word "produced" and not as associated with the *sādhya*, which is "absence of origination that is caused by a stick." So the definition of the reason (as requiring features (1-3)) is not over-extensive.

Gaṅgeśa sets forth some more definitions of a reason (*hetuvākya*):

(D7) A reason is that member of a *nyāya* whose case-

ending indicates causality.

The case-ending that conveys the sense of being a cause is the fifth or ablative case-ending. The sentence "from smoke" (*dhumāt*) involves that case-ending and is a member of a *nyāya*.

(D8) A reason is that member of a *nyāya* which produces the verbal awareness itself produced from expectancy conducive to this third member (called the "example").

The expectancy conducive to making use of an "example" is of the form "how does this serve as the ground for proving the existence of the *sādhya*?" This expectancy is caused by an awareness of the form "on the basis of the presence of smoke". The sentence that gives rise to such an awareness is the *hetuvākya* or reason.

(D9) (A reason is) language conducive to inferential awareness, involving the fifth (ablative) case-ending, and which gives rise to a verbal awareness not involving reference to a *sādhya*.

The qualifying phrase "involving the fifth case-ending" is intended to ward off over-extension of this definition of reason to cover the fourth member or application. In the inferential argument "Earth is different from all other categories because it possesses smell" that fourth member has the form "this one has the counterpositive of the absence that pervades (the property of) being some other factor." This sentence does not involve reference to a *sādhya*. So there is the possibility of the definition over-extending to cover this case. But, since the application does not consist of any word having the fifth case-ending, (D9) avoids that over-extension.

(D10) (A reason is) that sentence which has a case-ending expressing a cause and which produces an awareness that removes the expectancy regarding the cause on the basis of which something is sought to be established

From the linguistic awareness that arises from the statement of the thesis (that which is sought to be established), say, that the mountain has fire on it, there arises the expectancy concerning why the fire is predicated of that mountain. This expectancy is removed by an awareness of the form that the mountain has smoke, and that awareness is produced by the sentence "because of smoke".

(D11) (A reason is) a sentence leading to an inferential conclusion and involving a word having an ablative (fifth-case-ending) word.

The word in the ablative case is *dhumāt*. It secondarily

conveys the sense of the awareness of smoke. The sentence *dhumāt* is a member of an argument; it consists of a word ending with the ablative suffix. And, finally, it leads to an inferential conclusion. So (D11) applies to the word "*dhumāt*".

It has been emphasized that in a scholarly disputation the phrase "because of smoke (*dhumāt*)" alone is to be employed and not "because of being smoke-possessing (*dhumavattvāt*), as the suffix *matup* does not serve any purpose.

Definition of "Example" (*udāharaṇa*)

After the awareness arises--from a sentence expressing the reason--that smoke is the ground on the basis of which fire is sought to be established, there arises the expectancy as to whether the *hetu* of this inference is invariably related to the *sādhya*. For this the third member or "example" is employed.

Here is its definition:

(D12) A sentence expressing the example is a sentence that gives rise to the awareness of a locus wherein the unalterable relation between that which rests in the *hetu*--the less pervasive one--and the *sādhya*--the more pervasive one--is established.

Part of the sentence expressing the example runs "*yo yo dhumavān saḥ vahnimān*", involving repetition of the word "*yo*" but not of "*sa*" (or "*tat*). Gaṅgeśa substantiates this position by citing a sentence from the *Malatimādhava* as authority.

Definition of "Application" (*upanayana*)

When the invariable relation between the *hetu* and the *sādhya* is ascertained in a specific case with the aid of the sentence expressing the example, there may still linger a doubt as to whether the *hetu* that is invariably related to the *sādhya* exists in the *pakṣa* of this specific argument. In order to dispel such a doubt the sentence expressing the application is employed. An application is a sentence that gives rise to the knowledge that the *pakṣa* has that *hetu* that is invariably related to the *sādhya*. In other words, the sentence expressing the application gives rise to consideration.

The consideration that is the ultimate cause of inferential awareness cannot arise from the three earlier members of the argument From the example there arises awareness of the invariable relation between the *hetu* and the sādhya but there does not arise the awareness of the presence of the *hetu* in the *pakṣa*.

Objection: But that awareness of the *hetu* in the *pakṣa* arises through the statement of the reason.

Answer: No, for the statement of the reason merely identifies the form of the *hetu* when there arises the awareness that the mountain has fire from the thesis and when there arises the question as to why does the mountain have fire. The second member (i.e., the reason) therefore does not provide us with the knowledge of the presence of the *hetu* in the *pakṣa*.

Definition of "Conclusion" (*nigamana*)

The sentence expressing the conclusion is a sentence that gives rise to the verbal awareness referring to the presence of the *sādhya* in the *pakṣa*. It is arrived at by the awareness of the invariable relation between the *hetu* and the *sādhya* and the awareness of the presence of the *hetu* in the *pakṣa*.

Objection: Those two awarenesses mentioned in the previous sentence surely arise from the first four members of the argument and so there is no need for this fifth member.

Answer: No, for the awareness is that the *hetu* is not contradicted, and there is no counterbalancing *hetu* arising only from this fifth member and not from the other four. Therefore the conclusion is absolutely essential.

70.315.2.20 Fallacies (*hetvābhāsa*)

Edited in EnInPh Bibliography #s788.1.16; 788.1.20; 788.1.29.

Part One: General Definition (*sāmānyanirukti)*

Edited in EnInPh Bibliography #s 788.1.10; 788.1.16; 788.1.65; 1237.5.7.

Part Two: Deviation (*savyabhicāra* or *anaikāntika*)

Edited in EnInPh Bibliography #788.1.40.

Part Four: Counterbalanced Hetu (*satpratipakṣa)*

Edited in EnInPh Bibliography #s788.1.90; 1237.5.5.

Part Six: Sublated (*bādha*)

Edited in EnInPh Bibliography #788.1.19

70.315.2.21 The Inference to God's Existence (*īśvarānumāna*)

Edited in EnInPh Bibliography #s788.1.20; 788.1.29.

70.315.2.22 Power or Causal Efficacy (*śaktivāda*)
Edited in EnInPh Bibliography #s788.1.20; 788.1.29.

70.315.2.23 Liberation (*muktivāda*)
Edited in EnInPh Bibliography #s788.1.20; 788.1.29.

BOOK THREE : Comparison

BOOK FOUR : Verbal Testimony

70.315.4.1 Langauge (*śabdaprāmāṇya*)
Edited in EnInPh Bibliography # 788.1.18.

70.316. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN: *Muktivāda*

The work has been edited several times. "E" references in the following summary are to the edition by Kalipada Tarkacarya in Sanskrit Sahitya Parisad Series 4, Calcutta 1924.

Summary by Jitendranath Mohanty

In this work Gadādhara gives an exposition of final release according to Nyāya philosophy, criticizing the views of Udayana, Raghunātha and other Naiyāyikas as well as those of the Vedāntins and Sāṃkhyas.

(E5) Main Purposes (*mukhya prayojana*): (1) Satisfaction is knowledge and the absence of frustration

Definition: That whose desire is not due to the desire of something else.

(E15) Evidence for the Existence of Liberation. (i) Inference. The nature of frustration exists in a thing which is the counterpositive of an absence which exists when its own locus does not exist (ii) Scriptural texts such as "He should know the self".

(E35, 40) Nature of Liberation. Liberation is the absolute absence of frustration. The knowledge of the self as different from the body, etc. causes absolute-ness in the absence of frustration, since frustration being a specific quality (*viśeṣaguṇa*) of the self is momentary and is destroyed by the next specific quality of that self.

Absolute-ness in absence is defined as the absence of frustration (*duhkhābhāva*) which does not co-exist with its counterpositive (frustration) at any time in the same locus. There is absence of frustration daily in deep sleep, but the absence of frustration being defined, being endless, co-exists with its counterpositive frustration in the same person after waking. The absence of frustration caused by self-knowledge will not co-exist with frustration as there cannot be any frustration for the realized self after knowledge.

(E40) Views of Other Naiyāyikas: Some Tārkikas say that prior absence of frustration (*duḥkhaprāgabhāva*) is liberation. Since prior absence is beginningless it cannot be said to be a regular product of knowledge. But it is sustained by it. If there is knowledge there is prior absence of frustration in the same person. If there is no knowledge of the self there is no prior absence of frustration. The frustration remains.

(E46) Criticism of this view: The above view is incorrect since mere prior absence of frustration is possible even in the state of bondage. So it should be accepted that prior absence of frustration combined with the said absolute absence of frustration is liberation. This is impossible in final liberation, since at that time there cannot be any prior absence of frustration, any future frustration being impossible.

Gadādhara's view: Liberation is the absence of frustration not associated with prior absence of frustration. Though there is absence of frustration in deep sleep it is associated with the prior absence of frustrations which may occur later for the same person.

(E54) Another view: Absolute absence of sins (*karman*) is final liberation, not absolute absence of frustration, which may result from causes other than knowledge. Absoluteness here is the destruction of karma which does not co-exist with its counterpositive (sin) at any time in the same locus. Absence of karma resulting from expiatory rites or from experience of frustration co-exists with future karma of the same person. Only knowledge of the self has the capacity to destroy all karmas except those that have begun to bear fruit (*prārabdhakarman*).

(E74-75) The *smṛti* text "Actions do not perish without being enjoyed" should be interpreted in the sense of "without the performance of expiatory rites" or "without self-knowledge".

View of the Renunciate with One Staff (*ekadaṇḍa sannyāsin*): The adjunct, the association of which leads to Brahman's impurity and the dissociation of which to its purity, is ignorance, and the destruction of ignorance is final liberation. Frustration is a product of the internal organ, which again is a produce of ignorance, and when ignorance is destroyed by knowledge the mind perishes along with the frustrations located in it. Ignorance is a different category, which, though

beginningless, is destroyed by knowledge of Brahman. Brahman-knowledge is a psychosis of the internal organ.

(E85) View of the Renunciate with Three Staffs (*tridaṇḍī sannyāsin*): The self's dissolution is the blissful supreme Self in final liberation. Though the self (*jīva*) is not different from the Supreme Self (*paramātman*), the self is Brahman associated with a special adjunct (viz. mind) and its difference is conditional. The self's dissolution in Brahman is like that of the dissolution of a pot-conditioned *ākāśa* in the pure *ākāśa* when the pot is destroyed. Here the subtle body being the adjunct, its destruction is liberation. Since the destruction of the subtle body leads to the absence of frustration it is also a human end (*puruṣārtha*).

(E85-90) Views of Vedāntins Criticized. The view of the one-staffed renunciates is not entirely different from the view of three-staffed ones, since *māyā* is ignorance and the destruction of ignorance is liberation for both of them. Ignorance, says Gadādhara, is not a new category but a thing which is opposed to knowledge (*vidyā*). Therefore *adṛṣṭa*, which prevents the knowledge of reality, is ignorance. The absence of *adṛṣṭa* or its product (viz. frustration) is liberation.

Adṛṣṭa is brought about by good and bad deeds and so cannot be beginningless.

If it be said that only when ignorance perishes does the internal organ (*buddhi*) perish, and when *buddhi* perishes its qualities of satisfaction and frustration perish, Gadādhara says that satisfaction, frustration, etc. can perish even when the locus exists, and there is no need for its destruction. Moreover, if mind [i.e., the internal organ] has a beginning, the merits and demerits it acquires at the time of creation cannot be accounted for. If it has no beginning it can have no end.

(E96) Sāṃkhya view: The Sāṃkhya view is that *buddhi* is a product of *prakṛti* (here, *pradhāna*). *Adṛṣṭa* or the unseen product, effort, etc. are the qualities of the *buddhi*. The qualities of *buddhi* are superimposed on the *puruṣa* who is pure. The relationship of *buddhi* with the self (*ātman*) is his bondage, and its separation due to its dissolution is liberation.

Refutation of the Sāṃkhya view: Gadādhara rejects this view also, asking the same question, whether *buddhi* is beginningless or whether it has a beginning? On the first alternative it will have no end and its relationship with the self which causes bondage will have to be accepted as eternal. On the second, its special qualities and differences at the time of its creation will have to be accounted for.

(E112) View of the Bhāṭṭa Mīmāṃsakas: Kumārila Bhaṭṭa says that immediate knowledge of eternal bliss is liberation. Eternal bliss is spoken of in liberation in the *smṛti* text "bliss is Brahman's nature and it is realized in liberation". Others say that the *smṛti* text "Brahman is eternal knowledge and bliss" is the proof for accepting bliss as the nature of Brahman.

Rejection of this view: Gadādhara rejects this view, saying that when absolute absence of frustration is required in the state of liberation, in this view also there is no point in accepting eternal bliss and its endless stream of perceptions in that state.

(E113) The Knowledge of the Self's Real Nature is the Cause of Liberation. The *Bṛhadāraṇyaka Upaniṣad* says: "*ātman* is to be realized, for this one should hear, reflect upon and contemplate the self". Immediate knowledge of the self as different from the body, etc. is the cause and not mere verbal knowledge which does not destroy the traces of identity of the self with the body, etc.

(E121) View of Udayana and others: Udayanācārya and others say that immediate perception of God produced by intense contemplation is the means to liberation on the authority of the *śruti* text "I know the great *puruṣa*.... By realizing him thus one becomes immortal here itself". Perception of the self is also useful in destroying the beginningless traces (good and bad).

(E132) View of Raghunātha Śiromaṇi: Raghunātha says that according to the *Bṛhadāraṇyaka śruti* "The self should be realized. For this one should hear, reflect upon and contemplate...", which enjoins the knowledge of the individual self for liberation. The knowledge of the self alone is the means to liberation. The realization of God quoted above is the contemplation of the identity of the individual self with God. This identity is unreal, but its contemplation is helpful in bringing about the knowledge of the self.

Objection to this view: This view is contradictory to the *śruti* text "The *yogins* see eye to eye the revered eternal self".

Death in Kāśī, seeing the face of God, etc. bring about liberation through the knowledge of the self and not directly. By death in Kāśī, etc. the self gets another life in which Lord Śiva initiates him in Tārakamantra. By the efficacy of this *mantra* he gets self-knowledge and liberation. Thus in all cases

the knowledge of the self alone is the cause of liberation.

70.317. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Viṣayatāvāda*

This is a separate work of Gadādhara's, not a section of his commentary on the *Tattvacintāmaṇi* (as is wrongly implied by the references to it in EnInPh Bibliography). It has been edited a number of times, notably with translation and extensive analysis by Sibajiban Bhattacharyya, *Gadādhara's Theory of Objectivity*, in two volumes, New Delhi 1990. "ET" references are to the second volume of this work.[1]

The summary provided here will give an idea of the nature of the work, but it is hardly understandable for a reader not already well-acquainted with the style of this sort of material. To fully understand what is going on this summary is no substitute for what is provided in the translation and analysis given in ET.

Summary by Sibajiban Bhattacharyya

(ET3-5) Gadādhara here introduces the concept of a content (*viṣaya*) of awareness and the property of being a content of awareness. That every awareness has a content is evidenced by the introspective awareness of that awareness. In introspection an awareness is always cognized as having a content. The phrase "having a content" means that it is the awareness which determines the content-ness resident in the content. In simple language this means that the awareness and its contents are correlatives. If the awareness is given the content is fixed, and an awareness is uniquely described by stating its content.

That each awareness has a content can be established by cognizing that awareness, i.e. only by introspective evidence.

"Awareness *of* a content" simply means that the awareness is related to the content by a special type of relation, the first term of which is the awareness and the second term the content. This relation is content-ness (*viṣayatā*). The awareness

[1]The General Editor wishes to express his thanks to Prof. Sri Narayana Misra who kindly prepared a summary of this work for our use before Prof. Bhattacharyya's translation was published. With the availability of the translation it seems preferable now to provide the Bhattacharyya summary.

is related to the content by content-ness.

That relation (which is content-ness) is indeed not an additional entity other than the very nature of the awareness, just as counterpositive-ness is the very nature of the entity which is the counterpositive. As it is necessary to hold that everything has its own nature, there would be no scope for postulating an additional entity if the problem is solved by that content-ness being the very nature of the thing.

(ET6-11) Objection: It cannot be determined whether the very nature of an awareness or of the content is the relation between awareness and its content. Hence both the nature of the awareness and the nature of the content have to be admitted as the relation. But then it would be simpler to postulate one additional relation.

Answer: If content-ness were the nature of the content, then content-ness could not be said to be *in* the content. Hence content-ness must be identified with the nature of the awareness of the content. It was suggested by the opponent that it is simpler to postulate one single ontological entity, content-ness, instead of postulating that both the content and the awareness constitute content-ness. But Gadādhara points out that the position generally accepted by Navya-Nyāya philosophers is that even if both the content and the awareness be regarded as constituting content-ness, still it will not be overly complex. On the contrary, to postulate an independent ontologically real entity as content-ness will be a heavier theory. For in any case the content and its awareness have to be admitted, whereas postulation of any other ontologically real entity is not necessary. Moreover the postulation of such an entity will also raise the problem of relating it to awareness and also to the content. Thus the postulation of an independent, ontologically real entity to explain content-ness will be a heavier theory.

(ET12-20) After explaining the theory generally accepted by the traditional followers of the Navya-Nyāya school, Gadādhara now explains the position of more recent thinkers who deviated from the theory traditional during his time. This deviant theory is that content-ness, as the relation between the content and its awareness, cannot be ontologically identified with either or both the terms of the relation. The arguments for this deviant theory now follow.

A1 If content-ness be identified with the awareness itself then even the time of the occurrence of the awareness would

become a content of awareness, as the relation of awareness to the time of its occurrence is also identical with the nature of the awareness.

A2 The relation of awareness with its own absence, counterpositive-locus-ness, will not be ontologically different from the awareness itself; hence the awareness of the jar would have its own absence as its object.

A3 If content-ness be ontologically identical with the awareness itself, then in the compound absence of both the jar and the cloth, where one awareness has many contents, there will be correspondingly many content-nesses all of which will however be ontologically the same as the awareness. Hence the true awareness of both the jar and the piece of cloth would have to be regarded as false since the content-ness resident in the jar will be limited by the property cloth-ness and the content-ness resident in the cloth will be limited by jar-ness. For a false awareness is one the content-ness of which resides in something and is limited by a property not resident in that something.

A4 Immediately after such an awareness one ought to have a secondary (introspective) awareness of the form "I am knowing a piece of cloth as a jar", for only the awareness determining the content-ness resident in the piece of cloth and limited by jar-ness is the content of such a secondary (introspective) awareness.

(ET23-34) Gadādhara, explaining the position of deviant modern Navya-Nyāya philosophers, examines the position that content-ness is ontologically identical with the content. The objection in A3 to this identification is based on the fact that one and the same object, say a jar, can be the content of a true awareness as well as of a false one. But if the content-ness of an awareness is identified with the content then the content-ness of the false awareness and the content-ness of the true one would be identical, thus making the true awareness false. A true awareness differs from a false awareness of the same content by virtue of different content-nesses determined by these awarenesses. Thus the content-ness determined by a true awareness is different from the content-ness determined by a false awareness, even though the true awareness and the false one have the same content. The possibility of thus distinguishing between true and false awareness would be ruled out if content-ness determined by an awareness be identified with content of the awareness.

Likewise the awareness (a) "the ground is jar-possessing" and the awareness (b) "jar, ground and contact" could not be distinguished, the contents as well as the content-nesses being indistinguishable on the assumption of A3.

Objection: We can distinguish them by invoking Yajñapati Upādhyāya's insistence that to know a relation it is necessary to know which is the first term of the relation and which is the second. In (a) we are aware not only of the three terms ground, jar and contact but also that it is the ground that possesses the jar and not vice-versa, while in (b) this information is not conveyed.

Answer: This doesn't help. Consider (c) "jar, ground, contact, being the first term of the relation, being the second term of the relation". (a) cannot be distinguished from (c), but they are different.

Objection: In a qualified awareness where contact is the qualifying relation contact is cognized in and through itself, not under the mode (*prakāra*) contact-ness. For even an analyzable entity may be admitted to be cognized as a relation in and through itself. But in a conjunctive awareness of jar and cloth, contact is cognized under the mode of contact-ness, as contact is not cognized as a relation. Thus a qualified awareness and a conjunctive awareness are distinguished by considering whether contact-ness has been manifest in the awareness or not.

Answer: This doesn't help in distinguishing (a) from (c).

Objection: But in (a) the jar is the qualifier and in (c) the jar is the qualificand; thus they are distinct.

Answer: Having the jar as the qualifier is simply being the second term of qualifier-ness resident in the jar; similarly, having the jar as a qualificand is simply being the second term of the qualificand-ness resident in the jar. Now if qualifier-ness and qualificand-ness relative to the awareness be ontologically non-different from the qualifier and the qualificand then the qualified awareness will have the property of having the jar as the qualificand and the conjunctive awareness will also have the property of having the jar as the qualifier. For in your view qualifier-ness and qualificand-ness resident in the jar are identical with each other, both being identical with the jar itself. If, however, they are ontologically different then you concede our position, qualifier-ness and qualificand-ness being identical with content-ness.

Objection: Now, then, the actual second term and first

term of a relation are not in general the qualifier and the qualificand of any awareness, but are so only when they are manifested as the second or as the first term of the cognized relation.

Answer: But this attempt at salvaging the theory also fails. For it is very difficult to explain the meaning of "as" in "manifested as". Moreover, to be manifested in an awareness is to be a content of that awareness; hence qualifier-ness and qualificand-ness become forms of content-ness.

(ET35-45) Objection: The theory that content-ness is not only ontologically identical with the awareness but also with the content itself, but is of the nature of *both* the content and the awareness, avoids the above mentioned objections. For the content-ness of (a) resident in the jar, ontologically identical with both the jar and its awareness and limited by jar-ness, is not identical with the content-ness resident in a piece of cloth, identical with both the piece of cloth and its awareness, and limited by cloth-ness. Hence this conjunctive awareness cannot possibly be interpreted as false. Nor is there any possibility of non-distinct-ness between the above mentioned qualified awareness and the conjunctive awareness, for there is a difference in the content-ness of the two awarenesses, since the conjunctive awareness does not have the qualifier-ness determined by the qualifier awareness of that type and which is ontologically identical with both the jar and its awareness.

Answer: This theory too is untenable. The content-ness of the conjunctive awareness "both a jar and a piece of cloth", which is (i) resident in the jar and is (ii) limited by cloth-ness and (iii) is ontologically identified with the awareness of the jar, is cognized under two modes (a) the property of having the content-ness resident in the piece of cloth and limited by cloth-ness and ontologically identical with the piece of cloth and the awareness; (b) the property of having content-ness resident in the jar and which is limited by jar-ness and the awareness. This content-ness being determined by the conjunctive awareness, the charge that a true conjunctive awareness is rendered false cannot be avoided.

Objection: (Now another method is used to support the definition of content-ness as being ontologically identical with both the awareness and its content.) If content-ness is defined as ontologically identical with both the awareness and its content then content-ness-ness will reside in both the awareness and the content but not in each separately. Content-ness-ness

thus conceived becomes a property of the pair (*vyāsajyavṛtti*) or a pair-property which, like both-ness, can reside only in both the contents that make up the pair but not in each content separately. Navya-Nyāya philosophers postulate a new type of relation, the numerical relation (*paryāpti*). This numerical relation is a relation by which a property resides in two or many objects without residing in each. The type of property which becomes the second term of a numerical relation is a pair-property, and conversely a pair-property can reside in both or many without residing in each by being related thereto by the numerical relation.

Using this analysis a true conjunctive awareness cannot be given an interpretation which renders the awareness false by switching the content-ness resident in the jar with the content-ness resident in the piece of cloth. Content-ness is now identified with the nature of both the awareness and the content, content-ness-ness thus becoming a pair-property that can reside only in both the awareness and its content. As the jar is not an object in which the content-ness which resides in the piece of cloth can reside--for such a content-ness resides in all and only those objects which are ontologically identical with content-ness--there is no possibility of interpreting the true conjunctive awareness as false.

Answer: Is the property of being the content-ness limited by cloth-ness etc. an ontologically separate entity or not? If it is, then what harm is there in regarding content-ness as a separate ontological entity? If it is not, then content-ness cannot be a pair-property, as the very nature of the awareness or of its content is located completely and wholly in each of them.

Objection: Then the relation of content-ness to the content and to the awareness should be regarded as ontologically separate for similar reasons. If these relations be regarded as ontologically identical with content-ness then, the two relations of awareness and its content to the content-ness being indistinguishable, the content, too, like the awareness will have a content, and like the content the awareness too will have content-ness. So, then, content-ness being ontologically identical with its relations to awareness and the jar, the relation of content-ness to the absence of time, etc. become indistinguishable. Thus it would follow that absence of time, etc. too will have the jar as its object, and also the awareness of the content as its content. Hence for the same reason the relation of this relation of content-ness has to be admitted as

being ontologically different from other entities, and so on *ad infinitum*. Thus the awareness related to the relation of content-ness which is of the nature of determiner-determined relation, must also be ontologically a separate reality, and so on *ad infinitum*.

Answer: There is no harm in this infinite regress of ontologically real relations, all different from each other, since this infinite regress is supported by cogent reasons and is therefore not a defect.

(ET47-51) Like content-ness, its converse awareness-of-content-ness (*viṣayitva*)--the relation having awareness as the first term and the content as a second term--has to be regarded as an independent real. It cannot be reduced to being the second term of the relation of content-ness, for it cannot be argued the other way around that content-ness itself being the converse of this relation which is, therefore, fundamental. Hence both content-ness and its converse are to be regarded as independent reals.

Content-ness must be held to be different in different contents, otherwise in the conjunctive awareness "the jar and the piece of cloth" if the content-ness resident in the jar and the piece of cloth were identical, then by the arguments given above such an awareness would be erroneous.

If, to explain a conjunctive awareness resulting from content-ness resident singly in individual contents of an awareness of a single content like a jar, awareness-ness is postulated to be the determiner of a single content-ness over and above the content-ness resident in other objects, then this postulation will be heavy. On our theory (on the other hand) content-ness of *each* awareness which is to be assumed necessarily (in any case) can explain the possibility of conjunctive awareness, as there is no justification for the theory that content-ness differs when awarenesses differ.

As a consequence of the theory that content-ness as a separate reality differs with the difference in content, the theory that the qualificand and the qualifier of a qualified awareness have one content-ness has to be rejected. In the qualified awareness "the jar", the jar is the qualificand and jar-ness is the qualifier. The single awareness of the jar relates itself in two different ways by two different relations to the qualificand and to the qualifier which are elements in the content cognized. As content-ness is the relation of awareness to content, and as the awareness has two different relations to the qualificand and to the qualifier, the awareness therefore determines two content-nesses resident in the qualificand and the qualifier. Hence, the theory that there is one content-ness, determined by the awareness which is single, resident in both the qualificand and the qualifier, has to be rejected. If the content-ness resident in the qualificand, i.e., qualificand-ness, be identified with qualifier-ness, the content-ness resident in the qualifier, then there will be no way of determining which element in the content is the qualifier and which the qualificand. In the awareness of the jar one would be correct to say that the jar is the qualifier and jar-ness the qualificand, as there is total identity of content-nesses resident in them. Thus there will be no way of distinguishing between the qualificand and the qualifier *as objects*, i.e. by means of different content-nesses resident in them.

Objection: Qualificand-ness and qualifier-ness are not different content-nesses; they are not content-nesses at all. Like content-ness, qualificand-ness and qualifier-ness are two separate realities.

Answer: This involves unnecessary proliferation of entities. It is much simpler to hold that qualificand-ness and qualifier-ness are content-nesses.

(ET52-65) Objection: Even if qualifier-ness, etc. are not identified with content-ness, still all facts about awareness can be explained. Content-ness determined by a construction-free awareness is neither the qualifier-ness nor the qualificand-ness of a qualified awareness. This is because in construction-free awareness the content is directly presented, but is not cognized through any mode, and hence the content directly cognized does not have a relational structure of something cognized as something. Thus construction-free awareness has neither qualifier nor qualificand. Yet this type of awareness always has a content. This content-ness resident in the content of a construction-free awareness is, therefore, different from both qualificand-ness and qualifier-ness. This is a new type of content-ness.

Answer: If qualifier-ness and qualificand-ness are not regarded as content-nesses, then the causes of the two aspects of a consideration--the *hetu* being the qualifier and the *pakṣa* being the qualificand--cannot be given a general explanation by stating the common feature of both. The alternative of stating the general causation by stating the common feature--of having the content-ness resident in the *sādhya* determined by the

content-ness resident in the *pakṣa*--is not possible. Hence different causes have to be postulated to explain the two aspects of consideration.

Also, on the theory that awareness of a relation cannot be a cause of a relational awareness, such a cause would be an awareness of something as a qualifier or of something as a qualificand: hence there would two causes in such a case. On my theory, however, qualifier-ness and qualificand-ness both have the common feature of being content-ness different from relation-ness, and hence no causal law can be formulated.

Gadādhara explains another theory of content-ness according to which it is only the qualificand (in a qualified awareness) that has content-ness. The point to be noted here is that the content is not to be identified with that which is cognized. In a qualified awareness the three elements in the complex content--the qualificand, the qualifier and the qualification relation--are all cognized and there is no dispute over this. The dispute here centers around the point whether all the three factors cognized in a qualified awareness have to be regarded as contents of the awareness. The theory here is that only the qualificand of a qualified awareness has content-ness, not the qualifier. One may ask here: What harm is there if one supposes rather that it is the qualifier alone which has content-ness and not the qualificand? The answer is that the after-cognition following the primary awareness ("(a) jar") has the form "I am knowing the jar", not the form "I am knowing jar-ness". Now according to Nyāya whenever one is cognizing a jar, for example when one sees a jar, one does not know, in propositional perception, only the thing, but knows the thing under the mode of jar-ness. Thus when one sees a jar one has the qualified awareness of the object jar (the qualificand) under the mode of jar-ness (the qualifier).[1] Thus awareness of a jar is interpreted as the awareness of the thing under the mode of jar-ness. Now this jar-ness, being itself a universal, is cognized in and through itself and does not require to be cognized under any further mode. Thus even though in the primary awareness

[1]In western philosophy it is usual to distinguish between two senses of "know" ("see", etc.): in one sense these verbs take an accusative and in the other sense these verbs take a that-clause as their object. In Nyāya these two senses are not distinguished, for even when these verbs take an accusative, the corresponding awareness is always of something *as* something

jar-ness is cognized, still in the after-cognition of this primary awareness one does not have jar-ness as the content of the primary awareness. This absence of jar-ness as a content of the primary awareness as revealed in its secondary awareness is the reason, according to the upholders of this theory, for denying content-ness to the qualifier of an awareness (in this case, to jar-ness). In order to have jar-ness as the content of an awareness as revealed in a secondary awareness, one has to have a primary awareness of jar-ness under the mode of jar-ness-ness. It is only when one has cognized jar-ness under a mode that one can have an after-cognition of a primary awareness of jar-ness. But as in this case jar-ness is not cognized under any mode in the primary awareness, the after-cognition cannot be of the form "I am cognizing jar-ness".

Objection: Just as in the primary awareness jar-ness has been cognized in itself, so also in the after-cognition one would have jar-ness in itself as the object of the primary awareness.

Answer: The reason why this line of argument does not succeed is this. This after-cognition is a direct awareness; it is perception, although inner, of the primary awareness. Now there is a law of perceiving something which is related to something else which, in its turn, is related to a third thing. The after-cognition there is of a primary awareness which is related, say, to jar-ness which again is related to the perceived jar. Now the law of perception in such a case is that to perceive a thing as related to a term already related, the term has to be cognized as qualified by something. In symbols, if *a* is related to *b* which is related to *c*, then, in order to perceive *b* it is necessary to perceive it as qualified by something, i.e., under some mode. The primary awareness is to be perceived by the after-cognition, but the primary awareness (*a*) is related to jar-ness (*b*) which, again, is related to (inheres in) the cognized jar (*c*). So jar-ness (*b*) has to be cognized as qualified by something, i.e., has to be cognized under some mode; hence the after-cognition cannot cognize (perceptually) jar-ness in itself as related to (as a content of) the primary awareness.

Objection: The property of having a mode of jar-ness (e.g.) resident in the content-ness is really the property of being the determiner of mode-ness resident in jar-ness. If this is admitted then the content-ness of jar-ness which has become a qualifier will certainly have the content-ness of the qualified awareness, for mode-ness is a special form of content-ness.

Answer: The content-ness resident in the qualificand

does not determine, but is limited by, the mode-ness of jar-ness; hence jar-ness does not have content-ness determined by the content-ness of the jar. The point of this reply is this: When a jar is cognized under the mode of jar-ness, it is often said that the jar is the qualificand of the qualifier jar-ness in the awareness "(the) jar". Thus qualificand and qualifier become correlatives, for there is nothing like a qualificand *tout court* which is not *of* some qualifier. But then the qualificand-ness and the qualifier-ness must be the determiners of each other. The reply is that, although a qualificand must be relative to a qualifier of an awareness, still it is not necessary to hold that the qualificand-ness determines the qualifier-ness; it is enough if the qualificand-ness is limited by jar-ness resident in the qualifier. Now the property of being limited by is a relation: whether this relation is ontologically identical with its terms or not is a separate question.

There is, however, a difference. The limiter-limited relation to the counterpositive-ness is governed by co-extensionality, but not so in the case of content-ness, as even a property which is contralocated can be a limiter of content-ness. Or, being determined by mode-ness resident in the qualifier the content-ness has it as the mode. Or, let a property determined by content-ness, and called mode-ness, be admitted in the qualifier; still there is no proof that this property is content-ness and is the second term of the relation to awareness.

This, then, is the theory of one section of old Nyāya philosophers who have argued for the special ontological status of content-ness. But Gadādhara rejects this theory as well.

(ET67-76) Gadādhara's Theory. If the qualifier does not have content-ness of a qualified awareness, then immediately after cognizing something qualified by x a qualified awareness of x under the mode of x will not arise; for an awareness of a qualifier *as a content* is necessary to produce a qualified awareness. For on the previously-reviewed theory the qualifier of an awareness is not a content of that awareness and hence is not a cause of the qualified awareness. So also an awareness having the qualifier as its object cannot arise from an awareness of relatedness (*viśiṣṭajñāna*), for an awareness of the relatedness of something cannot arise only from an awareness with that thing as its content. For these reasons it follows necessarily that the qualifier has the content-ness of a qualified awareness; and also, because of the above-mentioned simplicity, it is established that the mode-ness resident in the qualifier has object-ness-ness.

(Gadādhara here shows the inadequacy of the opponents' arguments denying content-ness to the qualifier.) Other Navya-Naiyāyikas say: The opponents have found the defect of heaviness in the theory which ascribes content-ness to the qualifier, although they have conceded apparent simplicity to that theory. Now Gadādhara shows that their arguments to prove the heaviness of the theory are untenable. They have argued that there will be no reason to choose one of the two alternatives, viz. causal laws for memory. Now this heaviness, i.e., a theory's complexity, is not a defect of this theory because it is established on the basis of admitted facts. It is only because the opponents have admitted that the facts prove this theory that they can bring the charge of heaviness against it. The point here is that if one brings the charge of heaviness against a theory only by presupposing it, then this heaviness cannot tell against the theory. Thus heaviness of a theory is not always a defect.

Thus immediately after the qualified awareness "jar-possessing (is the) ground" an after-cognition "I am cognizing the jar" (as well "I am cognizing the ground"), in which the relation between the jar and the awareness is revealed, is confirmed by everyone's experience. Hence it is necessary to postulate, in the qualifier, content-ness which is really a relation to awareness. It cannot be said here that in the above after-cognition a chain relation of the jar to the awareness is cognized, this chain relation being the second term (of the relation to) the content-ness having itself as mode. For only the jar itself, which has become the qualifier, is the content of the qualified awareness in that form, but not the ground which is the qualificand. Moreover, in the after-cognition "I am cognizing the ground" it can also be easily seen that a chain relation between the ground and the awareness is cognized, the chain content-ness having itself as the qualificand-ness. Thus as there is no reason for choosing one of the alternatives rather than the other it is established that the content-ness of a qualified awareness belongs to both the qualified and the qualificand.

(These replies to the position of the opponent that it is the qualificand alone which has content-ness are not Gadādhara's own replies. They are the replies given by others who also accept Gadādhara's theory that both the qualifier and the qualificand have content-ness.)

(ET78-86) Like qualificand-ness and qualifier-ness qualification-ness, too, is a special kind of content-ness. So qualification too has the content-ness of a qualified awareness.

Objection: There is no justification for a relation having content-ness in a qualified awareness, for there is no after-cognition "I cognized inherence" immediately following a primary awareness (of e.g. "a jar"). Such an after-cognition would have to cognize the relation of what is related to (qualified by) inherence-ness and hence can follow only an awareness having inherence-ness as its qualifier.

Here the opponents of the theory that a relation cannot be a content of a qualified awareness give the following argument based upon the preventer-prevented relation among awarenesses. In logic and epistemology Navya-Nyāya uses extensively various facts, generalized into laws, about certain awarenesses blocking certain other awarenesses. This blocking of awarenesses by awarenesses may be purely psychological or may be based upon the nature of the objects cognized. Navya-Nyāya ignores the first type of blocking but builds its epistemological and logical theories on the second type. Now it is a rule of Navya-Nyāya that an awareness of the form *a* is *b*-possessing is blocked by an awareness of the form *a* is absence-of-b-possessing. Yet the "-possessing" in "*b*-possessing" involves necessarily a relation, and this relation has to be built into the blocking awareness as the limiting relation of the counterpositive-ness resident in *b* in "absence-of-*b*-possessing." To talk of "absence of *b*" it is necessary to specify what it is for *b* to be present, i.e. to specify the relation in which *b* would occur in a locus. By varying these relations which limit the counterpositive-ness resident in the counterpositive of an absence different absences are obtained. Thus if a jar is present on the ground it is present there, say, by the relation of contact. Now to say that the jar is absent one has to refer to this relation of contact. Otherwise, even though a jar be present on the ground, one may still say truly that the jar is not present in the sense in which a jar is present in its halves. The relation of the jar to its halves is inherence, and the jar does not inhere in the ground, so even when one cognizes that the jar is on the ground one may also cognize truly that the jar is not on the ground if relations are omitted from consideration.

The awareness "the jar is present on the ground" will prevent or block the awareness "the jar is not on the ground" if and only if the being present on the ground in "being not present on the ground" is by the same relation in which the jar was cognized to be present on the ground in the first awareness. Thus if relations are not cognized in qualified awarenesses, then an awareness of a relational complex cannot block the awareness of the contradictory relational complex.

Answer: It should not be said that even if being a preventer of a contradictory awareness is regulated by relations relevant to particular cases, and hence in the case of prevented awareness with limiters of substratum-ness relations are cognized (in the primary awarenesses), still in the case of awarenesses without the limiters this does not hold. For even awarenesses without limiters of substratum-ness are prevented by awarenesses of non-residence in the cognized substratum. Hence the preventer-ness of the awareness of non-residence has to be regulated by relevant relations. So even in such cases the awareness of relations has to be postulated. So also being a true or a false awareness is regulated by relevant relations, and hence all qualified awarenesses must cognize relations. If being a true awareness or being a false one be not regulated by relevant relations, then one would not cognize some awareness with the pot-halves as the qualificand and the pot as the qualifier to be a true awareness, and some other awareness of with the same kind of content as false; all awarenesses of pot-possessing-ness of the pot-halves by inherence would be true, and all such awarenesses under the mode of absence of pot by the relation of contact will automatically be false.

For even if qualified awarenesses do not have relations as content, still relations (though not contents of qualified awarenesses) and qualifier-ness may be related by the limiter-limited relation. It is then possible to avoid the difficulty of explaining truth and falsity, and the limiter of prevented-ness, by contradictory awareness in terms of the qualifier-ness limited by appropriate relations. It cannot also be said that "a relation's being the limiter of the qualifier-ness" simply means its being the locus of relational content-ness determined by qualifier-ness", any other definition being difficult to state, since we have just stated one!. Hence the content-ness of relations in qualified awarenesses is conclusively established.

For the limiter-ness resident in relations and determined by qualifier-ness has either the property of being a self-linking connector or of being an independent reality like the limiter-ness determined by counterpositive-ness. Admitting content-ness of a special kind in this limiter-ness does not make any

difference. Moreover, the postulation of this content-ness is wholly unjustified. Functioning as a relation in qualified awareness is just being such a limiter, and not a special kind of content-ness.

(ET88-92) Now Gadādhara explains the position of some Navya-Nyāya philosophers who argue that relations are contents of qualified awarenesses. Their argument is in two parts, which we shall now explain.

Part I. In this part they try to show that an awareness of a relation to some content would not be able to produce a qualified awareness of that content or a qualified awareness of that content.

Now it may be argued that this difficulty is no difficulty for no after-cognition corroborating this causal connection between awarenesses of these forms is available and hence this is a desirable consequence rather than a difficulty. But this cannot be regarded as a desirable consequence for the following reasons:

(i) The word "*manas*" means something having *manastva* (*manas*-ness) which is not under any further mode. Anyone who knows this meaning of the word would have the corresponding verbal awareness. In order to explain how one gets the awareness having *manastva* itself as its qualifier from hearing the word "*manas*" one has to rely on a causal law.

(a) One must know the meaning of the word "*manas*". This "knowing the meaning" means here that by hearing the word one would get the awareness of *manastva* itself as the qualifier.

(b) One must also remember the meant object. Now where (a) one knows that the word "*manas*" means something possessing *manastva*, but under the mode of being a universal, and (b) remembers this meaning, one will have, by hearing the word "*manas*", an awareness with *manastva* under the mode of being a universal as its qualifier.

If this causal relation between the awareness of the meaning of the word and the awareness which results from hearing this word be not admitted, then one would have to admit that, from hearing the same word "*manas*", sometimes an awareness with *manastva* under the mode of being a universal as its qualifier and sometimes an awareness with *manastva* without any mode as its qualifier would result. If, however, this causal relation is admitted, then the form of the resulting verbal awareness will depend upon how one has known the meaning

of the word.

Now one can cognize the meaning of "*manas*" as something possessing *manastva* in itself as the qualifier of the awareness and one has the prior non-verbal awareness of *manastva* in itself as its content. For if one does not already have an awareness of something as its content one cannot have an awareness with that thing as its qualifier. A qualified awareness in which something is cognized under no mode requires as its cause a prior awareness of that something also not under any mode (not necessarily as the qualifier). When one cognizes something as a jar, one has an awareness with jar-ness in itself as the qualifier. In order to have this awareness one must have a prior construction-free awareness of jar-ness, although it will not be a qualifier of this awareness--a construction-free awareness has no qualifier, no qualificand either.

Now although jar-ness in itself, under no mode, can be cognized in construction-free awareness, *manastva* cannot be cognized in such a way. For, according to Nyāya, *manas* is of atomic size, and therefore cannot be a content of ordinary perception, and hence the universal *manastva* too cannot be a content of ordinary perception. Now Nyāya also admits that only a content of ordinary perception can be a content of construction-free perceptual awareness. No supersensible content can ever be perceived in construction-free perception. So one cannot perceive *manastva* in itself.

If, for an awareness of something in itself another such awareness is necessary then there will be infinite regress. This means that a qualified awareness with something in itself as its qualifier cannot require another such qualified awareness as its ultimate cause. This regress of causal awarenesses, the succeeding ones being caused by preceding ones, stops when one reaches a construction-free perception of something in itself which will then function as the qualifier in succeeding qualified awarenesses. But we have already seen that, according to Nyāya, such construction-free perception of *manastva* is impossible. So the problem remains how to explain the possibility of a qualified verbal awareness with *manastva* in itself as its qualifier.

Part II. On the basis of these arguments these Navya-Nyāya philosophers postulate that relations are contents of qualified awarenesses. For, then, *manastva* can in itself be cognized as a relation in some qualified awareness. This

awareness of *manastva* as a content will explain the possibility of a later qualified awareness with *manastva* in itself as its qualifier. Thus relations have to be regarded as contents of qualified awarenesses.

It may be objected here that if *manastva* in itself can be cognized as a relation in some awareness, and then this awareness of *manastva* in itself can produce a qualified awareness, here in the present example verbal awareness with *manastva* in itself as its qualifier, then one may as well argue that all universals, and not merely *manastva*, can be cognized in themselves as relations in some awareness which will then produce a qualified awareness with all universals in themselves as its qualifier. This will mean omniscience. For to have a qualified awareness with all universals in themselves as its qualifier will necessarily be to have all reals as instances of these universals for the qualificand of this awareness. Thus this awareness will be the awareness of all reals which are instances of universals, and that will lead to omniscience.

The reply to this objection is that the awareness of a universal in itself as a relation is to be postulated only when it becomes necessary to explain facts. As omniscience is not a fact, i.e. an awareness with all universals in themselves as its qualifier is never experienced, there is no reason to postulate an awareness of all universals in themselves as a relation in some awareness.

(E92-96) The theory that awareness of something as a relation produces awareness of that something as a qualifier is not necessary. For even without such a theory one can explain the possibility of a verbal awareness having *manastva* in itself as its qualifier. For one can hold that there can be a memory with *manastva* in itself as its qualifier. And this memory lies at the root of the awareness of the meaning of the word "*manas*". From this awareness of the meaning one can come to have a verbal awareness of that form.

Objection: In order to have a memory involving *manastva* in itself one must have a prior experience with *manastva* in itself as its qualifier. But as we have already seen that it is not possible to have an informative awareness with *manastva* in itself as its qualifier, a recollection of this form is impossible.

Answer: Even though there may not be any memory-trace of an informative awareness of this form in this life, still such a remembrance in this life is possible through traces left in

the self in a previous birth.

Objection: This postulation of traces acquired in previous lives as the causes of memories in this life does not really solve the difficulty. For the question now is how one could have received such traces in a previous life. For in that life too an informative awareness of this form is impossible and hence in that life too no one could have such a memory.

Answer: The answer to this is to be found in the Navya-Nyāya theory that the series of previous births does not have a beginning. Hence it is possible to argue always that such traces in a previous life would produce an informative awareness in the next life. This infinite regress of previous lives does not create any serious logical difficulty, as we take it to be a fact.

There is also the possibility of an alternative solution. Without assuming a beginningless series of lives of an individual, it is still possible to explain the facts. The causal law of traces and memories that they produce is this:

Law 1: A memory with something as its qualifier is caused by a trace of that form (i.e. of that something as its qualifier).

This Law simply states that a memory of something as a qualifier requires the prior existence of traces of the same form. But the theory criticized here requires much more. The law which it invokes is this:

Law 2: A memory of something as its qualifier without any mode is caused by a trace having that something as its qualifier without any mode.

Law 2 is much stronger than Law 1. Law 1 states, in general terms, the causal relation between traces and memories produced by them, while Law 2 introduces special features into the causal law. But this Law 2 is not corroborated by introspective evidence or on other grounds. There is no reason to postulate such a special causal law between traces and memories.

Objection: Every memory having *manastva* under the mode of universal-ness as the qualifier will have *manastva* in itself as its qualifier; hence, a memory of the simple form "universal-possessing" will be impossible.

Answer: No, for memories with *manastva* in itself as their qualifier are controlled by special exciters which are, therefore, to be postulated on the strength of the resulting awareness only where a memory of the form "*manas*: is confirmed in an after-cognition. Otherwise a person having two

kinds of traces caused by two successive awarenesses--one of *manastva* under the mode of uniniversal-ness, the other of *manastva* in itself, as the qualifier--cannot have, even on your own theory, a memory of the form "without *manastva* as its qualifier universal-possessing" with *manastva* as its qualifier.

Objection: It is not possible to have a memory with *manastva* in itself as its qualifier from a trace with *manastva* under the mode of universal-ness; in that case, there is no impediment to the awareness of universal-ness in that part (as the mode of the qualifier) in the conjunctive awareness of the form "universal-possessing and *manas*", so it is possible to have a memory with two types of content-ness in that part (i.e., the qualifier part).

(ET98-110) Answer: Really, there is no difficulty in holding that a memory of the form "*manas*" may result from a trace in which the mode of universal-ness has been suppressed (not recollected) but which has otherwise the same form. Suppression of that part is due just to the absence of its exciter.

Objection: Even if a memory with something in itself as its qualifier results from a trace with that as its qualifier under some mode when the mode of the qualifier is suppressed, still if one has an awareness of all universals under the mode of universal-ness resulting from *sāmānyalakṣaṇapratyāsatti* (a type of extraordinary perception), then one may have a memory with all universals in themselves as its qualifier, when the mode of universal-ness is suppressed in the memory. But this will result in one's being omniscient.

Answer: No. As it is the result to be explained which completely determines what exciters have to be postulated, during the suppression of universalness there is no objection to non-postulation of exciters for the memory of all universals. No further discussion on this point is necessary. And in this way the argument that a qualified awareness does not have the relation as its content does not lead to any insoluble difficulty anywhere. It does, however, run counter to the established theory of the system.

Objection: In an awareness of a qualified relation the relation-ness of the qualifier is a constituent of the qualified relation and must be regarded also as a mode-ness. So also the relation-ness of the qualificand must be regarded as qualificand-ness. For otherwise the awareness of the form "a conch-shell-necked thing does not exist in the relation of counterpositive-ness as being limited by conch-shell-necked-

ness" cannot be explained as an erroneous awareness. There is no error in the awareness of the relation of the jar by the relation of counterpositive-ness to the absence, for the absence is related to the jar by that relation. Nor can it be said that the error is in the awareness of the absence as related to the jar by the relation of counterpositive-ness limited by conch-shell-necked-ness, for there is no such qualified relation. Nor can it be said that the error is in the awareness of the absence as related to conch-shell-necked-ness by the relation of being a determiner of the counterpositive-ness limited by itself, for it is not a qualifier of that. If it were a qualifier of the absence then the absence would have been stated as being qualified by such a property. Therefore it cannot also be said that there is erroneous awareness of absence in such a property the relation "being the limiter of counterpositive-ness", because absence is not the qualifier of that property. Nor can it be said that the awareness is erroneous, the awareness being limited by conch-shell-necked-ness in counterpositive-ness, nor of conch-shell-necked-ness in the limiter-ness of counterpositive-ness, because that is not a mode, being a constituent of the relation. Hence it is necessary to postulate qualifier-ness and qualificand-ness and, in particular, relation-ness and then to postulate content-ness of qualified awareness in relation, qualifier-ness etc. being pervaded by content-ness.

Answer: A simpler, hence better, alternative theory is one based on a distinction between an independent mode of a qualificand and a dependent mode. An absence is the qualificand of which the counterpositive is the qualifier. The qualifier resides in the absence by the relation of being the determiner of the counterpositive-ness. For example, in the absence of a jar the jar is the counterpositive of the absence. This means that the absence is the determiner of the counterpositive-ness resident in the jar. To cognize absence of the jar is to cognize that the absence is jar-possessing by the relation "being a determiner of the counterpositive-ness".

But what about jar-ness? Jar being the counterpositive of the absence, jar-ness is the limiter of this counterpositive-ness. The jar has counterpositive-ness limited by jar-ness. Jar-ness, therefore, is a direct qualifier of the jar, while the jar is the direct qualifier of the absence. But jar-ness is not a direct qualifier of the absence. The absence is not an absence of jar-ness, but of the jar.

It is now proposed to introduce a new concept of

dependent mode-ness and to regard jar-ness as the dependent mode of the absence. Thus dependence of jar-ness is on the counterpositive, i.e., the jar; it is only by being a direct qualifier of the jar that jar-ness becomes a mode of the absence.

This difference between an independent mode and a dependent mode is reflected in the language expressing the awareness. In the case of an independent mode the qualificand is always mentioned as mode-possessing. For example, jar-ness is an independent mode of a jar, and hence a jar is always mentioned as jar-ness-possessing. Although a dependent mode is a mode of the qualificand, the qualificand is never said to be dependent-mode-possessing. This difference between a dependent and an independent mode is explained by means of a complex example of Caitra with a stick (in his hand) having earrings. Here Caitra is the qualificand and earrings its qualifier. The stick which is a property of Caitra is the limiter of the qualificand-ness resident in Caitra. Thus both the stick and the earrings are qualifier of Caitra. But the stick is a dependent mode of earrings. To admit this is not to say that the awareness is of the form "stick-possessing is the earring-possessor". From "*a* is an independent mode of *b* and *b* is an independent mode of *c*" we cannot get "*a* is an independent mode of *c*". Thus the relation, being an independent mode, is not transitive. The suffix "-possessing" can be used only with an independent mode.

Now what is the definition of being a dependent mode? We must notice that *a* has two mode-nesses, (i) the (independent) mode-ness of *b*, and (ii) the (dependent) mode-ness of *c*. Mode-ness dependent on *b* is that mode-ness which is limited by mode-ness determined by the qualificand-ness resident in *b*. Let us explain this definition.

a is a mode of *c*, simply because it is a mode of *b*. The two mode-nesses resident in *a* are related by the relation of limiter to limited. The mode-ness of *c* resident in *a* is limited by the mode-ness of *b* resident in *a*. Now what is the mode-ness of *b* resident in *a*? This is a relation of independent mode-ness which is defined as mode-ness determined by the qualificand-ness resident in *b*. If *a* is the independent mode of *b*, then *b* is the qualificand of *a*. This means that *b* has the qualificand-ness which determines the mode-ness resident in *a*. Now having defined independent mode-ness, mode-ness dependent on *b* resident in *a* is defined as the mode-ness resident in *a* which is limited by the independent mode-ness of *b* resident in *a*.

So, in the example discussed by the supporters of the earlier theory, absence of conch-shell-necked-thing, conch-shell-necked-ness which is the limiter of the counterpositive-ness becomes a dependent mode of the absence itself. This explains why the awareness is erroneous, for this dependent mode is the wrong mode of the absence. It is, therefore, not necessary to postulate that a relation cognized in a qualified awareness of a special type is also a qualifier of the qualificand of the awareness.

(ET111-125) Objection: In that case the mode-ness determined by qualificand-ness resident in the counterpositive is the same as that determined by the qualificand-ness resident in the absence. But in the case of independent mode-ness it differs with the different qualificands and hence the above mentioned two mode-nesses are different, each being common to each. So also dependence (of mode-ness) on that is merely the non-difference of the mode-ness determined by the qualificand-ness resident in that.

Counterobjection: In that case, just as an awareness of that which has conch-shell-necked-ness as mode-ness with regard to the absence, so also it has mode-ness with regard to the counterpositive by the relation, being determiner of the counterpositive-ness limited by itself. As in your theory the mode-ness limited by that relation and determined by the qualificand-ness resident in the absence is identical with the mode-ness determined by the qualificand-ness resident in the counterpositive, an awareness of that form would be erroneous with regard to the counterpositive too.

Objector's answer to the counterobjector: No. An awareness of that form does have the mode-ness--conch-shell-necked-ness--limited by that relation and determined by the qualificand-ness resident in the counterpositive. Yet it does not have the property of being a determiner of mode-ness of that property which is the determiner of the relation-ness which is resident in such a relation and is determined by the qualificand-ness resident in the counterpositive. Thus mode-ness of that property, in that relation, and with regard to that, is merely the mode-ness of that property which is the determiner of the relation-ness which is resident in that relation and is determined by qualificand-ness resident in that. Hence there is no such over-extension as has been alleged.

Answer: This theory is untenable. If it were true then the mode-ness in conch-shell-necked-ness in an awareness of that

form with regard to the counterpositive would become dependent upon the absence and also dependent on not mentioning the counterpositive by an expression producing the awareness of something qualified by that.

Objection: It would be simpler to postulate mode-ness-ness in relation-ness rather than postulating mode-ness of the above-mentioned form of a property which is the qualifier of the counterpositive with regard to the absence; for it is simpler to postulate a property than to postulate an entity possessing the property.

Counterobjection: Even on this theory a relation-ness being limited by that property has to be postulated as the qualifier of the counterpositive-ness which has become the relation of the counterpositive; and hence it is necessary to postulate a substratum of a property.

Answer to the counterobjection: No. Even on your theory, in the part relating to the property of being a determiner of limited counterpositive-ness, relation-ness determined by mode-ness resident in that property has to be postulated, as postulation of relation-ness is equally present in both.

On the theory that the qualifier property of the counterpositive has mode-ness with regard to the absence, the relation-ness which is resident in the counterpositive-ness and is determined by mode-ness of the counterpositive is also determined by the relation-ness which is resident in limited-ness and is determined by the mode-ness resident in the qualifier of the counterpositive. This is sufficient to explain such a property being cognized as the relation of being the determiner of the counterpositive-ness limited by itself. So also, as your theory advocates relation-ness of the counterpositive as being the determiner of the counterpositive-ness qualified by limited-ness by that property, so also my theory propounds the postulation of one counterpositive-ness as being the determiner of the counterpositive-ness limited in that way; hence in this respect the two theories are on a par. Again both the theories are the same in postulating mode-ness which is resident in that property and as determined by relation-ness resident in that property and by relation-ness resident in being limited in that way. But you have to further postulate mode-ness-ness in relation-ness, which is an additional reality.

But what is the use of such subtle arguments given above? Granted that particular relation-ness has particular

mode-ness, even by this content-ness (of qualified awareness) of relations is not established.

(ET125-130) It also needs to be admitted that there is a relation of determiner-determined-ness between relation-ness on the one hand and mode-ness as well as qualificand-ness on the other. And that relation is either a particular self-linking connector or a separate ontological real, just like the relation with cause-ness and effect-ness, superstratum-ness and substratum-ness, successor-ness and predecessor-ness. Otherwise the meaning of "having that as a mode by that relation" cannot be explained.

Here Gadādhara presents an argument against the theory that a relation-ness of a cognized relation is related to the determiner-determined-ness relation to the qualifier-ness and the qualificand-ness. Here there is no disagreement on the theory that that the qualifier, qualificand and relation are all cognized in a qualified awareness. The dispute is only over the question whether relation-ness is to be related to the qualifier-ness, etc.

The countertheory proposed here tries to explain what is meant by having a qualifier of a qualificand in a certain relation. The definition proposed is that the awareness will be of that relation and will have qualifier-ness resident in whatever be the qualifier determined by the qualificand-ness resident in whatever be the qualificand. That is, the relation will be cognized but the relation-ness resident in it will neither determine nor be determined by the qualifier-ness or the qualificand-ness. These will have the effect of keeping the relation in the cognized structure completely independent of the qualifier and the qualificand of the awareness.

Gadādhara, therefore, points out the following absurdities in this countertheory. He chooses examples of awareness in such a way that different relata with different qualifiers or qualificands get cognized in each of them. The first example that Gadādhara gives is an awareness which has two qualifiers in two relations. When one cognizes that a jar is on the ground by contact and color in the ground by inherence, then there are two qualifiers of the same qualificand, the ground, by two different relations. Now if that the awareness cognizes the relation is enough to produce a relation between qualifier and qualificand, then in the present case one can easily say that color is the qualifier of the ground by contact and jar by inherence.

The second example is of an awareness which has one qualifier of two different qualificands by different relations. When one, for example, cognizes that the halves and also the ground are jar-possessing, the former by the relation of inherence and the latter by contact, one can very well say that one has cognized the halves as jar-possessing by contact and the ground by inherence.

These absurd consequences are avoided, Gadādhara asserts, if one accepts the theory that the cognized relation is cognitively dependent upon the qualifier and the qualificand of the awareness. Thus an awareness will be of a relation between a qualificand and a qualifier if and only if the relation-ness resident in the relation either determines or is determined by the qualifier-ness resident in whatever be the qualifier and so also with the qualificand-ness. Thus a relation cognized as holding between a qualifier and a qualificand of an awareness will have its relation-ness determining or determined by the qualifier-ness resident in the qualifier of that awareness as well as the qualificand-ness resident in the qualificand. If this is admitted, then it is easy to see how the difficulties in the opponents' theory are avoided. An awareness that the ground possesses the jar by contact and color by inherence cannot now be construed as an awareness that the ground possesses the jar by inherence and color by contact. For the relation-ness resident in contact determines or is determined by the qualifier-ness resident in the jar, not in color. So also with inherence.

(ET132-133) The opponents here argue that it is not necessary to postulate that relation-ness determines or is determined by mode-ness and qualificand-ness. It is a well-established theory of Navya-Nyāya that the mode-ness in a qualified awareness is limited by the specific relation which is cognized in that awareness. This ensures that the cognized relation is not epistemically unrelated to the mode and the qualificand of the awareness. Hence in the awareness "the ground possesses the jar by contact and color by inherence" one cannot switch the relations and render it false. For the mode-ness resident in the jar is limited by contact and determines the qualificand-ness resident in the ground, while the mode-ness resident in color is limited by inherence and determines the qualificand-ness resident in the ground. We cannot say that the mode-ness resident in the jar is limited by inherence or vice versa. Thus we can very well explain how the cognized relation is epistemically related to the mode and the qualificand of the same awareness.

The reply to this theory of the opponent is to be found in the fact that the limiter is the correlative of the limited, i.e. limiter-ness determines or is determined by limited-ness. Thus in order to explain the epistemic relation between the cognized relation and the mode-ness in terms of the limiter-limited relation we really use the determiner-determined relation between limiter-ness and limited-ness.

Now it may be argued that even though it be admitted that relation-ness determines or is determined by mode-ness there is no need to postulate further that it determines or is determined by the qualificand-ness also. For example, the awareness "the halves possess the jar by inherence and the ground by contact" can be adequately explained by holding that the mode-ness resident in the jar and determined by the relation-ness resident in inherence is not determined by the qualificand-ness resident in the ground. Here although the mode-ness and the qualificand-ness have been admitted to be related by the determiner-determined-ness relation, and relation-ness is so related to mode-ness, still it is not so related to qualificand-ness. Why, then, is it necessary to postulate such a relation?

The reply given here is that there is no reason for preference of the one to the other. Just as one can hold that relation-ness is so related to mode-ness but not to qualificand-ness, so also one can equally hold that relation-ness is so related to qualificand-ness alone. And there is no ground for choosing one alternative rather than the other. Hence it will be unreasonable to reject any one of the alternative.

Now if it is admitted that relation-ness determines, or is determined by, both mode-ness and qualificand-ness of a qualified absence, then there will be no reason to hold the theory that mode-ness and qualificand-ness are directly related to the determiner-determined relation. Gadādhara expresses here the view that such a direct relation between mode-ness and qualificand-ness is not justified at all. They are related to each other only indirectly through their relation to relation-ness.

(ET134-137) Mode-ness is of two kinds: not limited, and limited by another qualifier. Of these the not-limited mode-ness is the mode-ness resident in jar-ness in the awareness "the jar". For here jar-ness is cognized in and through itself. Mode-ness of this kind is not admitted in anything different from

universals (*jāti*) and unanalyzable imposed properties (*akhaṇḍopādhi*).

The mode-ness of the jar in the awareness "jar-possessing" is itself limited, jar-ness being the limiter of the mode-ness.

It cannot be said that there is no reason to postulate a limiter-limited relation of that type of mode-ness with jar-ness. The difference of that awareness from the awareness "substance-possessing" can be explained in terms of having a different mode of the jar.

For if the mode-ness resident in the jar in that awareness is not admitted as limited by jar-ness, then the difference between the two conjunctive awarenesses "substance-possessing is the ground and the jar" and "jar-possessing is the ground and substance" cannot be explained, for in both awarenesses substance-ness and jar-ness are modes of the jar and the jar is the mode of the ground. But on my theory in the first awareness the mode-ness of the jar is limited by substance-ness and in the second by jar-ness, and hence the two awarenesses are different because of difference in the mode-nesses.

Really the mode-ness of the jar, etc., being limited by jar-ness, etc. is simply being determined by the mode-ness resident in jar-ness, etc.

It cannot be said that the determiner-determined relation holds only between mode-ness and qualificand-ness, but not between two mode-nesses. For, in this case, only the mode-ness which is resident in the jar and is determined by the qualificand-ness resident in the ground is identical with the qualificand-ness determined by the mode-ness resident in jar-ness. Hence the determiner-determined relation can hold between such mode-nesses.

(ET141) Qualificand-ness, too, is sometimes not limited (by any limiter), and sometimes limited by another qualifier. Of these, in the awareness "the jar" without any limiter of concrete-ness the qualificand-ness determined by mode-ness resident in jar-ness is not limited (by any limiter). In the awareness "this (is a) jar", a qualified awareness having jar-ness with the limiter of concrete-ness, the qualificand-ness determined by the mode-ness resident in jar-ness is limited by this-ness. Hence this-ness, etc. in such a case is called the "limiter of concrete-ness", the limiter of the qualificand-ness is the same reality as the limiter of concrete-ness. Limiter-ness determined by (i.e. of) qualificand-ness is not mode-ness determined by that; if this were the case, then in the awareness "the jar" and awareness "this is a jar" jar-ness would be the limiter of characterized-ness, and qualified awarenesses without a limiter of characterised-ness would be impossible. But limiter-ness is of the nature of a term, or an independent reality like the limiter-ness determined by (i.e. of) counterpositive-ness.

(ET149-151) In conjunctive awareness the qualificand-ness differs with difference in the modes. A conjunctive awareness is regularly produced by the collection of the totality of causal factors of awareness having each as its qualifier; and hence there is successor-ness to qualificand-ness of the awareness having each mode in that (conjunctive) awareness. In an awareness of the form "this is a jar", "stick-possessing (is) ear-ring-possessing", etc., where the limiter of characterized-ness is one property and the mode is another, there will be one qualificand-ness determined by both mode-nesses according to those who admit a kind of mode-ness in the limiter of characterized-ness.

Those who hold that the mode-ness in the limiter of characterized-ness is that which is common to a different awareness are of the view that the qualificand differs with different modes.

If, however, an awareness of the form "sword-possessing, ear-ring-possessing Caitra"--which is different from conjunctive awareness, not having the modes related as limiters of qualificand-ness and qualifiers, but having a content qualified by both sword and earring--is really evidenced by introspection, then even then there will be one qualificand-ness determined by two qualifier-nesses. Otherwise there will be no difference of this type of awareness from conjunctive awareness.

So also in an awareness of the form "sword-possessing, earring-possessing (is) brave Caitra" in which both the sword and the earring not related as qualifier and limiter of qualificand-ness are yet cognized as the limiters of characterized-ness of bravery, there, too, there will be one qualificand-ness determined by the mode-ness of both sword and earring. Whether this qualificand-ness is or is not different from the qualificand-ness determined by mode-ness of bravery limited by those two is to be decided as stated earlier.

So also where either the sword etc. has acquired limiter-ness of characterized-ness, and the other, the earing etc., limiter-ness of predicative characterized-ness, there is the qualificand-ness determined by the mode-ness of the sword and

limited by earring, etc., and the qualificand-ness limited by both properties and determined by predicative mode-ness are the same. Otherwise this cannot be distinguished from the conjunctive awareness in which the sword and the earring, not being related as qualified and limiter of the qualificand-ness, but which has its qualificand limited by both and bravery etc. as its predicate, and in which earring is cognized independently as the limiter of characterized-ness of th sword.

So also the sword etc. has limiter-ness of qualificand-ness determined by mode-ness resident in the sword etc. Why, then, it does not have limiter-ness of characterized-ness resident in itself has been explained earlier. The two qualificand-nesses are limiters of the other qualificand-ness; hence that awareness is different from a conjunctive awareness.

(ET158-161) Gadādhara has used in the previous paragraph a new concept, that of predicate-hood (*vidheyatva*). The analysis of awareness so far has been in terms of a qualifier, a qualificand and a relation between them. This means that every awareness has been conceived so far of something as something, some object cognized under some mode. But the concept of a predicate of an awareness introduces an entirely new perspective for studying awareness. A predicate is usually that which is cognized about something which is the subject. In Western philosophy a judgment, a proposition, a statement or a sentence is analyzed into a subject and a predicate. To know, to say, to state something of something is to assert something about something. In Indian philosophy in general, and Navya-Nyāya in particular, the assertive element in awareness is just certainty, a subjective state opposed to doubt or vacillation. There is no concept of logical assertion corresponding to, e.g., Frege's assertion sign. This is because the structure cognized, although relational, is still a complex object, never a fact in the sense of the *Tractatus*. Thus even the concepts of subject and predicate can be introduced in the analysis of cognized structure, over and above the usual concepts of qualifier, qualificandum and relation; no element of assertion is introduced into awareness.

This follows from a theory of predicate-hood which Gadādhara criticizes, one that identifies predicate-hood with qualifier-ness. Gadādhara's own theory is that the predicate of an awareness cannot be identified with its qualifier, i.e., predicate-ness cannot be just a kind of qualifier-ness.

The only reason that Gadādhara adduces here to support his theory is based on the theory that the limiter of characterized-ness is also a qualifier, but cannot be regarded as a predicate. For example, in the awareness "pot-possessing (is the) ground" ground is the qualificand and ground-ness is the mode under which the ground is cognized as the qualificand. Ground-ness, therefore, is the limiter of the qualificand-ness or characterized-ness resident in the ground. This means that unless the thing which is the ground is cognized *as* ground, it cannot be said about it that it is pot-possessing. Thus not any property which functions as limiter of characterized-ness, even though it is a qualifier, can be a predicate. It is the presupposition of any predicate being predicated of the subject.

Predicate-hood is just qualifier-ness which is determined by the principal qualificand-ness and which is different from the limiter-ness of qualificand-ness. In "fire-possessing (is the) hill" the qualifier-ness resident in hill-ness which is the limiter of the characterized-ness is identical with the limiter-ness of characterized-ness; for it has been established that the limiter-ness of characterized-ness has qualifier-ness-ness, and hence hill-ness cannot be said to have predicate-ness here. To prevent predicate-ness of fire-ness in that awareness, and of fire in "the country possessing the hill possessing fire", the adjective "being determined by the principal qualificand-ness" is provided. Principal-ness of qualificand-ness is its not being limited by qualifier-ness or being different from qualifier-ness.

It cannot be objected that even without the memory of difference from limiter-ness of qualificand-ness, etc., immediately after the inference "fire-possessing (is the) hill" the secondary awareness of the form "I am inferring fire on the hill" cognizing predicate-hood of fire, etc arises, and hence predicate-hood of that qualifier-ness is not proved. For the content-ness of such a secondary awareness is admitted only of inference-ness with fire as its qualifier.

It cannot be said that immediately after the inference of the form "fire-possessing hill (is) jar-possessing" that there will be a secondary awareness of that form. For the secondary awareness having mode-ness resident in that merely reveals inference-ness having that as its qualifier; hence no such objection is possible

(ET164-168) On your theory too, to prevent (introspective) awareness of predicate-hood somehow represented in an inference not having that as the predicate, it is necessary to postulate as the cause an awareness having that

as predicate.

Objection: It is heavier to postulate that the mode-ness which is resident in that as stated above and which has a richer structure is the cause in that relation than to postulate that predicate-hood as a separate reality resident in that is the cause, in the relation of successor-ness, of the introspective awareness of that form.

Answer: No, for it is against Navya-Nyāya theory to postulate an additional reality other than a universal for the sake of simplicity of the causal relation. Otherwise an additional content-ness can be regarded as established in order to distinguish inference with light as its *hetu* from the limiter-ness of the effect-ness of consideration of smoke.

If mode-ness as described above be identified with predicate-hood, then in inferences having the *sādhya* as qualificand as in "difference from water in earth", "absence of smoke on a lake" etc., how the *sādhya* can be a predicate become inexplicable.

(ET181-182) For it cannot explain how in the awareness of the meaning produced by the sentence "on the hill (there is) fire" fire has predicate-hood.

Objection: In this awareness being a superstratum of the hill is the predicate of fire, and not fire the predicate of the hill.

Answer: No. In the awareness of the meaning of a sentence it is the referent of the last word that is the predicate. Hence in the sentence "hateful are my enemies" hateful-ness, being presented by a word coming first in the word order, has yet been intended by this speaker as the predicate; still, it being impossible to cognize a connection among the references with that as its predicate, it has been regarded as a defect of unconstructed predicate by the rhetoricians.

Hence Vardhamāna Upādhyāya has feared the impossibility of having a connected meaning from the sentence "of the attributes attribute-ness" as there attribute-ness being the limiter of subject-ness cannot be regarded as the predicate.

If the qualificand be regarded as the predicate then in that awareness inexplicability of attribute-ness as the predicate should not be feared.

It cannot be said that in inference for the sake of others proving exclusion from others in what is limited by attribute-ness which is the limiter of objects to be defined, there canot be any awarenesses of sentence-meaning from an application of the form "this possesses attribute-ness which is the counterpositive of the absence which is the pervader of exclusion by others". This is what Vardhamāna feared. For, as in "the stick-possessor is the red stick-possessor", where in the predicate there is something more which is cognized in the pervasion, so also there would have been no difficulty in explaining the awareness of related objects by understanding the meaning of the sentence as the relata of attribute-ness to have predicate-hood by the relation of identity.

It cannot be said that the reference of two nouns cannot be directly related, and that hence in "on the hill fire" predicate-hood cannot be related to the hill. For the rule is that the reference of two nouns cannot be directly related as the qualifier and the qualificand; hence here the relation of qualificand-qualifier-ness can be explained, if only indirectly.

(ET184-185) Like predicate-hood, subject-hood, too, is independent content-ness different from mode-ness, etc. It cannot be said that qualificand-ness *is* subject-hood, for then in the awareness of the meaning of the sentence "on the hill, fire", as conclusion with the *sādhya* as the qualificand has been justified, the subject-hood of the hill cannot be explained.

Let predicate-hood and subject-hood be independent reals; still, there is no justification for ascribing content-ness to them. In the inference "the hill is fire-possessing" it is necessary to admit qualifier-ness and qualificand-ness in the hill and the fire, for this distinction is common to perceptual awareness. Simply by admitting this distinction their content-ness is explained.

If qualifier-ness, etc. are not admitted in the inference, then it cannot be explained how the inference can be blocked by awareness of the absence of the *sādhya* in the *pakṣa*, and also how it can block a contradictory awareness. It is mode-ness, etc. which is the limiter of such preventer-preventedness.

(ET186-188) Gadādhara concludes his treatise by stating briefly a very important point. He has propounded the theory that two pairs of terms, qualifier and qualificand and subject and predicate, cannot be reduced to one pair. Ontologically their properties are all real entities.

But now he raises a further point. Is the distinction between subject and predicate an epistemological distinction? By denying that the content of awareness has this distinction, he has given a negative answer to the question. He has argued that it is necessary to introduce the qualifier-qualificand distinction into what is cognized, for otherwise the preventer-

prevented relation among awarenesses cannot be explained. But why should a further distinction, that between subject and predicate, be introduced into what is the content of awareness? We hazard the guess here that this distinction may be merely psychological. This does not mean that the distinction is unreal or subjective. It merely means that the distinction between the subject and the predicate in what is cognized may be relative to the cognizer, instead of being in what is cognized. The subject is that about which one wants to cognize something, and the predicate is that which is cognized about it. Although Gadādhara has accepted the syntatactical-semantical rule that the referent of the last word in a non-compound expression is necessarily the predicate, still this does not mean that the predicate is an element, a constituent, of the subject. A different word order necessarily changes the subject and the predicate, but this change does not imply that there has been any change in the qualifier-qualificand distinction. This latter distinction is essential to content-ness, for different types of awarenesses are distinguished from each other in terms of them. But no such function is ascribed to the subject-predicate distinction. Hence Gadādhara, in his concluding passage, suggests but does not develop the point that there is no reason why subject-ness and predicate-ness should be ascribed content-ness of awarenesses.

70.318. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Śaktivāda*

The first Chapter of this work, titled *Sāmānyakāṇḍa*, has been edited and translated by V. P. Bhatta (Poona 1994). The second and third Chapters are promised as a subsequent volume from Prof. Bhatta. The following summary of Chapter One is based on Bhatta's edition and translation ("E and T"). A summary of Chapters Two and Three is contributed for this Volume by S. B. Raghunadhacharya; it is marked as "R".

Several passages of the work have been translated or summarized in Jonardon Ganeri, *Semantic Powers: Meaning and the Means of Knowing in Classical Indian Philosophy* (Oxford 1999): selections from those passages has been indicated by "G". Ganeri indicates many useful parallels and comparisons with Indian and Western writers. The first Chapter (*Sāmānyakāṇḍa*) is translated into French and studied in Gerdi Gerschheimer, *La Théorie de la Signification chez Gadādhara: le Samāyakāṇḍa du Ṣaktivādavicāra* .Publications de l'Institut de Civilisation Indienne Fascicule 65.1-2 (Paris: College de France,

1996), with an English summary on pp. 621-630. Ganeri notes the passages he translates which are also rendered by Gerschheimer. Finally, we reproduce from Gerschheimer's summary pp. 626-629 those passages summarizing the contents of the remaining Chapters; references in that portion are to pages in Gerschheimer's second volume cited above.

Chapter One: *Sāmānyakāṇḍa*

(E344; T232; G25) I.1 The two kinds of word-meaning (*padavṛtti*) are designation (*saṃketa*) and indication (*lakṣaṇā*)

I.2 (E344; T232; G25) The meaning (content) to which a word refers (*padārtha*) is what is understood from becoming aware of the word.

I.3 (E344; T233; G31) The designation is what the speaker desires to convey, that is either (a) that his words should convey a certain meaning or that (b) that a certain meaning should be conveyed by such-and-such a word.

I.4 (E344; T233-234) The designation technically conveyed (*paribhāṣā*) is what is desired to be made known by the speaker.

I.5 (E344; T234-235; G31-32) The designation conventionally expressed, the intended meaning (*śakti*), is God's designation; it is what a speaker (conventionally) must mean (*vācaka*) by an expression. For example, "cow' conventionally means cows, i.e., things characterized by cow-ness--said (by the old school) to be the primary meaning of a word.

(E344; T235-238; G32) I.6-7. Which is the content of an expression wholly depends on whether the expression is in the active or passive mood. If it is active the meaning is to be understood following I.3.(a), while if it is passive it is the reverse, that is, I.3.(b). And which is the primary meaning of the expression determines which is the agent and which the object in that expression.

(E344; T239-240) I.8-10. Mīmāṃsaka: If the theory just laid down were followed then corrupt expressions too, since they are conventionally understood, would become meaningful, and thus we would have to hold that God desired such words to be understood in that way. Furthermore, we could explain the meaning of metaphorical expressions such as "the village on the Gaṅgā" as meaning a village on the bank of the river Ganges as due to God's desire for that meaning--and so the account of designation would over-extend to cover indications (secondary

meaning) as well.

(E345; T241-242) I.11. Now some (commentators say Pārthasārathi Miśra) suggest that the intended meaning be rather understood as confined to words God utters desiring them to be understood in a certain way. Since God does not utter corrupt expressions or metaphorical ones, they do not fall within the resulting definition.

But we (Mīmāṃsakas) say (in answer to these commentators) that this suggestion is untenable, since then the definition would fail to apply to words whose intended meaning is due to us, not to God, and also would over-extend to expressions which have more than one meaning; besides, proper names would fail to have meaning on this account, not having been intended by God.

(E345; T243) I.12. Furthermore, words would be meaningless for those of us who don't believe in God!

(E345; T243-244) I.13. Objection to the Mīmāṃsaka: One shouldn't include God's designation within the conventional designation of a word. And thus linguistic awareness (*śabdajñāna*) need not be divided into technical and conventional, since both conventional and technical meanings are designative.

(E345; T244-245) I.14. Answer by the Mīmāṃsaka: Then even a speaker's intention will constitute word-meanings, and as a result indications would become expendable since all such meanings would fall among the primary kind.

(E345; T245-246) I.15. Gadādhara: No. A speaker's intention, while it is conducive to a hearer's awareness of meaning, perhaps even a necessary condition of it, should not be accounted part of meaning itself. It is only the designation conducive to awareness of the meaning of a word that constitutes word-meaning directly, and these are the expressive and indicative powers of the word, not the speaker's intentions. Furthermore, word-meaning is recalled prior to any memory of a speaker's intention.

(E345; T247-248) I.16. Mīmāṃsaka: But the understanding of being on the bank of the river, gotten when one hears "village on the Gaṅgā", can be gleaned from understanding the speaker's intention through remembering it without knowing anything about either conventional or technical word-meanings. Besides, we learn the technical meanings of words coined by modern speakers by recalling their intentions.

(E345; T24-250) I.17. Gadādhara: Rather, one hearing "village on the Gaṅgā" recalls the Ganges and then recalls its banks through indication alone, so that it is not necessary to even bring in the speaker's intention. Likewise, modern authors, who utilize specialized notions such as "wooden elephant" or feminine endings in a context which makes these uses understandable, the expressions utilize words or endings whose meanings are known to us independently of remembering any speaker's intentions.

(E345; T251) I.18. Mīmāṃsaka: Even so, it is only the speaker's intention that constitutes the proper analysis of meaning, and not the designation, whether technical or conventional. The existence of God cannot be proved.

(E346; T252-253) I.19. Objection to the Mīmāṃsaka: The relation of word to meaning takes the meaning as established by God and others as qualificand and the contentness of the word described by the awareness produced thereby as the qualifier. The relation of meaning to word is just the reverse of this. Otherwise how can we explain how verbal awareness results from hearing words? But God and others do not establish corrupt words' meaning in this way, so those words' meaningfulness is merely illusory.

(E346; T254) I.20. Mīmāṃsaka: No. There is no criterion to establish that the understanding of one person (such as God) rather than another establishes the meaning. Rather, it is a distinct relation, a spoken-speaker relation, that is inherent in words conveys the meaning of, e.g., cow-ness.

(E346; T255-256) I.21. A different theory, held by some Mīmāṃsakas, is this: Words have a capacity (*śakti*) to produce the awarenesses of the contents meant by those words, but not the power to produce the meanings themselves. However, a phrase such as "the village on the Gaṅgā" does not have the capacity to produce verbal awareness of a village on the banks of the Ganges, for it can merely excite the traces corresponding to the words involved (i.e., "village" and "Gaṅgā", but not "banks").

(E346; T257-258) I.22. The Prābhākaras say: A meaningful expression is one that has the capacity to indicate what is yet to be accomplished. "Pot" alone does not have that capacity; an optative such as "bring" is required for meaningfulness.

(E346; T259) I.23. Objection to the Prābhākara theory: But words, unlike fire, must have a distinct expressive power in

order to produce recollection and verbal awareness of meanings.

(E346; T259-260) I.24. Mīmāṃsā (Bhāṭṭa) answer: Nevertheless words can lead to recollection and verbal awareness of their meanings merely on the basis of the inherent nature of the words, not as something distinct from those words.

Objection: But since words are non-eternal they cannot have inherent expressive power.

Mīmāṃsā answer: No. Words are eternal, and have expressive power by nature.

(E346; 260-261) I.25. Some Mīmāṃsakas say: Even supposing that words were non-eternal, if the knowledge of the word is what has inherent expressive power your objection has no force.

(E346-347; T261-262) I.26. Gadādhara: No. This entire (Mīmāṃsā) theory will not do. A Mīmāṃsaka cannot distinguish the expressive power of words from their indicative power--both involve words taken to be conducive to verbal awareness through memory of their meanings. Memory of meaning is merely a means to linguistic awareness.

(E347; T262-263) I.27. Some say here: Well, indicative words (such as "Gaṅgā") do not have expressive power to mean, e.g., the banks of the river; it is only a word such as "village" that expresses the meaning, and that meaning involves the banks of the Gaṅgā as well. So the two kinds of meaning can be distinguished.

(E347; T263-264) I.28. But this suggestion will not do. If it were right we would not need indicative words at all, since there would be nothing for them to do. Furthermore, it would become unintelligible how a hearer could understand a truncated expression. A truncated expression such as "because of smoke" will lack expressive power altogether.

(E347; T264-265) I.29. Mīmāṃsaka: It is not meanings that are the contents of linguistic awareness; rather such contents being remembered are understood as fitting the context and thus conducing to linguistic awareness though not as contents.

(E347; T265) I.30. Answer: But they must be contents, since recognition can only occur when one becomes aware of the words meaning them.

(E347; T266) I.31. Mīmāṃsaka: That is incorrect. One doesn't recognize the indicated meanings by linguistic

awareness, but only expressed meanings (quoting Śabara).

(E347; T267-268) I.32. Gadādhara: This theory that indicated meanings are not contents of linguistic awareness is wrong. If it were right we shouldn't be able to properly understand the meaning of, e.g., "the cots are crying" (used to convey the notion that people lying on the cots are crying). The persons must be known, i.e., be contents of awareness for this to be understood.

You must of necessity admit this, since you admit that recollections are causes of linguistic awareness. And you must therefore likewise admit that indicative words may become expressive through conducing to recollection of their meanings. Furthermore, you must admit that awareness of certain words being syntactically and semantically related to other words is the cause of our awareness of meanings.

(E347; T269-270) I.33. (Objection: Then words with secondary meaning and corrupt expressions will have their meaning derived from God's desire!)

Answer: No. The old Naiyāyikas do not say that, e.g., the word "Gaṅgā" (in "villages on the Gaṅgā") produces an awareness of the bank of the river as being the meaning of "Gaṅgā", but only that the bank of the river is part of the content of the awareness produced from hearing the sentence. Thus God's desire is not that "Gaṅgā" means its banks; indeed, the banks are not a part of the meaning of "Gaṅgā". Likewise with the meanings of corrupt expressions.

(E347; T271) I.34. Mīmāṃsaka: Then you can't hold (as you claim) that all meanings derive from the desire of God.

(E347; T271-273) I.35. Gadādhara: No. Although God's desire doesn't determine the particular meaning in such cases, it does generally determine the meaning of such expressions as well. How does this work? In "(this is a) cow" the expressed meaning, cow, is the qualificand and the content-ness, the awareness produced from hearing the word "cow", is the qualifier, so that the cow is what is desired by God to have the qualificand-ness. So, e.g., a piece of cloth is not part of the meaning of "pot", so that when one says "bring the cloth", even though pot is an object of God's desire, it is not the qualificand of the particular desire of God that applies there.

(E348; T274) I.36. Now the Prābhākara Mīmāṃsakas' theory (of *anvitābhidhānavāda*, that words do not convey meaning except in the context of a sentence) says that all the component aspects of a meaningful sentence, including the

relation of word to thing meant, should be made part of the expressed meaning of a word such as "pot", (and so the relation involved counts as an object of God's desire in addition to the substance and its property).

(E348; T275) I.37. Objection to the Prābhākara: If you were right "(this is a) pot" would be meaningless, since it is not found in the context of a sentence.

(E348; T276) I.38. Prābhākara: But it can be remembered as having been found in the context of other sentences.

(E348; T277) I.39. Actually, our theory should be construed as applying only to words in their general meaning, and not to the specific meanings in a particular context.

(E348; T278; G136) I.40. Naiyāyika: Still, the relations involved need not count as part of the expressed meaning.

(E348; T278-279; G136-137) I.41. Prābhākara: No, for a sentence is not understood unless its terms are understood as related in the way expressed by that sentence.

(E348-349; T280) I.42. Gadādhara: Your *anvītābhidhāna* theory is incorrect, because if it were right when hearing a word we should remember all the features of the thing meant, whereas in fact we need not do so. For example, having known a cow by the name "milch-cow" without ever having seen it drinking milk, and hearing the term "milch-cow" now, I remember that cow even though I do not remember him as drinking milk. Thus one does not have to remember the specific features of a thing to recall that a given word refers to it.

(E349; 281) I.43. Likewise, we can remember what a cow is without cognizing its relation to cow-ness, even though cow-ness is a property of cows.

(E349; T282-284; G355-356) I.44-45. Objection: Since both primary (*śakti*) and secondary (*lakṣaṇā*) meanings are meanings, memory of them constitutes the cause of awareness of them. But then the distinction you just alluded to can't possibly occur.

Gadādhara: No, for this common meaningfulness cannot be clearly expressed.

(E349; T285) I.46. Objection: Since secondary meaning expresses a relation to the primary meaning, memory of the primary meaning alone will constitute the cause of awareness of both.

(E349; T286) I.47. Answer: Then "pot" may mean a cloth.

(E349; T287-288) I.48. Objector: No, for when one remembers a meaning one remembers which things are primarily meant and which secondarily.

(E350; T289-290) (I.49. Gadādhara: If you were right, remembering that the word "cloth" had a meaning at the same time as the word "pot" would constitute a verbal awareness of the pot, which it doesn't.

(E350; T290-291) I.50. Objection: Then remembering a meaning should be confined to cases where the content of the memory is the same as the content of the awareness that is remembered.

(E350; T292) I.51 Answer: But in fact that is the case in this instance!

(E350; T292-293) I.52 Objector: So what is wrong with that?

(E350; T294-296) I.53-54 Gadādhara: Just this: that remembering that a pot was meant previously does not always cause the awareness of a pot, which was your theory in I.44-45. This is why what you said in I.44-45 isn't right.

(E350-351; T297-298) I.55 So to understand what a word means it is not enough to know what object is being referred to: one must also know the limiter of that object as content of this awareness. Thus there are two ways of presenting the meaning of a word: (a) specifying what the word refers to by giving its limiter, (b) specifying the word whose meaning involves the limiter. These are not reducible to one another.

(E351; T299-300) I.56 In a parallel way there are two ways of providing a definition: (a) by giving the word's meaning through specifying its limiter; (b) by indicating the meaning expressed by the word as indicating the limiter. And these also are not reducible to one another.

(E351; T300-301) I.57 In each case one must specify the full meaning (involving the limiter in the relevant way).

(E351; T302) I.58 And so it is incorrect to say (as you did in I. 44-45) that memory is sufficient to identify the particular meaning of a particular occurrence of a word.

(E351; T303) I.59 Objection: You leave out the specification of the relation involved between the qualified and qualifier in a judgment, and so merely saying, e.g., "the substance is the pot" is compatible with all sorts of false judgments since it is not specified what relation is indicated by the "is".

(E351; T303-304) I.60. Answer: No, for part of the meaning of a word is the expectancy intended by its speaker, limiting its veridical relations with other things.

(E351; T305-306; G178-179) I.61 Objection: (ascribed to Raghunātha Śiromaṇi in his *Tattvacintāmaṇi-Pratyakṣa-Dīdhiti*): Rather, it is mandated by God's original assignment of a meaning to a word.

(E351; T306-307; G182) I.62 Answer: It won't do to explain e.g. a meaning newly-introduced (*ādhunika*) for an old term by stipulation (since one would not then ever construe the word in its original sense).

(E352; T307-308) I.63 "Pot" means a thing limited by pot-ness, and not by adventitious qualifiers such as substance-ness, etc.

(E352; T308-309) I.64 Objection: A pot is limited both by pot-ness and by, e.g., substance-ness, which are both its limiters.

(E352; T309-310; G198) I.65 Answer: The meaning (*śakti*) of a term is threefold: a (chief) qualifier, a qualificand, and a relation. These are, relevant to the application of the term "pot", pot-ness, a pot, and inherence. So although substance-ness, e.g., is a quality of a pot it is not the chief qualifier of the term "pot", but rather an adventitious quality of pots.

(Each word must have an occasion-for-use (*pravṛttinimitta*), a property which is peculiar to the referents of the word and distinguishes its meaning. E.g., this will be pot-ness in the case of "pot". But the old Nyāya, which does not allow that the chief qualifier of the term "*ākāśa*" is "being the locus of sound", seems to suggest that it has no chief qualifier at all, no occasion-for-use. But then how could its meaning be learned?)

(E352; T312-313) I.66 Mīmāṃsaka: No, the meaning is just the qualificand, the pot; it is qualified by being-the-content-of-the-cognition. If to be a qualificand is to be an object of God's desire every word could mean anything!

(E352; T313-316) I.67-68 Answer: God doesn't desire (the) pot. Rather, his desire is that the word "pot" mean (a) thing in which pot-ness inheres. That is, his desire is that there be a relation (technically termed *saṃsargamaryādā*) among certain substances, pot-ness, inherence in the appropriate relation and the word "pot".

(E352-353; T317-318) I.69 Despite the involvement of several components in this description of God's desire, the content-ness qualifying the qualificand, the pot, is single (though this is not because God's desire is single). Furthermore, the meaning of a word can be related only to the entire meaning of another word, not to a part of that meaning. Thus "Pot is eternal" (*ghaṭo nityaḥ*) is an incorrect statement.

(E353; T319) I.70 Objection: A simpler way of showing the incorrectness of that sentence is to revise the rule to say "the meaning of a word can be related only to the chief qualifier in the meaning of another word", and pot, not pot-ness, is the chief qualifier of the meaning of "pot is eternal".

(E353; T320-322) I.71-72 Answer: That revision is unnecessarily complex, The proper formulation of the terms involved in the rule accomplishes the needed exclusion of "eternality" as a proper predicate of "pot", since pot-ness is only part of the meaning of "pot".

(E353; T323-324) I.73-75 This point shows how important it is to specify, in particular, the relation involved in any analysis of meaning, and ultimately the importance of indicating precisely which are the three components (qualifier, qualificand and relation) identifying each term in the meaning of a sentence.

(E354; T327-329) I.76-77 Objection: It is not necessary (as you imply it is) that one has to cognize the qualifier, pot-ness, under a qualification, viz. pot-ness-ness. But it is necessary to identify the relation, here inherence, under its qualifier inherence-ness, since inherence-ness is an imposed property (unlike pot-ness, which is a proper universal).

(E354; T329-331) I.78-79 Answer: One has to specify the limiter of the qualifier-ness and the qualified-ness to identify the specific things that are intended. But one does not have to appeal to inherence-ness to identify inherence; inherence can appear only in its own form.

(E354; T332-333) I.80 The chief qualifier of the cognition "this is a pot" is pot-ness, not, e.g., substance-ness, etc.

(E354; T333-334) I.81 Objection: Well, when being-single (single-ness) is the chief qualifier there is ambiguity, since both the pot and the substance are single.

(E354-355; T335-337) I.82-84. Answer: No, since God mandated that pot-ness, and not substance-ness, be the referent of "pot". Thus God's mandate is the cause of the specific limitation involved in a particular judgment.

(E355; T338-339) 85-86 Raghunātha Śiromani: All that

is necessary to understand the exact meaning of a sentence is to know precisely what they refer to: one does not have to bring in limiters in all three cases (of qualifier, qualified and relation). Also, a universal property cannot be cognized as a qualifier, but only as a limiting property of an individual. I.e., a universal need not be invoked to distinguish the limiter of the qualified-ness, since all that is needed--and it is there already--is to know what the speaker's specific intention is.

(E355; T341-342) I.87 Answer: No, since then in the case of meanings spawned by a modern convention they would also have to be viewed as meanings mandated by God, and they can't be both!

Chapter Two (*Viśeṣakāṇḍa*)

"E" references in this summary are to the edition by Gosvamī Damodara Sastri in Kashi Sanskrit Series 57, Banaras 1927. In a few cases Ganeri's explanations have been quoted or paraphrased by the Editors.

(E65-68; G203) "(Here is a plausible theory.) When a thought about *ākāśa* arises from the word "*ākāśa*", it can even be of *ākāśa qua* substance different from (the other) eight substances, and other such modes--there is no fixed rule that (it be of *ākāśa) qua* substratum of sound.... Therefore, (we should say that) the meanng relation of the word "*ākāśa*" is directed towards that which is merely indicated (*upalakṣita*) by the property being-the-substratum-of-sounds. (Ganeri identifies this view as Raghunātha's.)

Ganeri explains (p. 205): "As an account of what is involved in understanding ordinary proper names, this theory has much to recommend it. But as applied to theoretical names like "*ākāśa*" it is implausible. The problem with such an account is this. Both (the classical and Raghunātha's theory that theoretical names are descriptive) are motivated by the thought that the sentence "*ākāśa* is the substratum of sounds" is not a tautology... Yet neither give the... description "the substratum of sounds" *any* distinct semantic role...

(p. 207) "Gadādhara has another suggestion (as to why people find '*ākāśa* is the substratum of sounds' non-trivial).....(pp. 208-209) Someone who asserts '*ākāśa* is the substratum of sounds', having just been asked whether space is the substratum of sounds, conveys the information that *ākāśa* is not identical to space. Again, if uttered in response to the question 'What is the substratum of sounds?', it may convey the information that the name '*ākāśa*'" designates the substratum of sounds. Thus the literal triviality of the sentence is consistent with its having a significant 'metaphorical' reading in a particular context. In this way, Gadādhara undermines what was the main traditional argument against a descriptivist treatment of theoretical names.

(E83-97) G, p. 215: "Consider the pronoun 'it', as it occurs anaphorically in sentences like (1a) and (1b):

(1) (a) There is a pot here--bring it.

(b) There is a cloth here, bring it.

Gadādhara makes a number of assumptions about the pronoun 'it' here. First, he takes the pronoun in these cases to be an indexical referring expression, referring in (1a) to a certain pot and in (1b) to a certain piece of cloth....". (p. 217) "Gadādhara's next assumption is that the semantic reference of the pronoun is determined by the speaker's thoughts in uttering it.

(E85; G218) "Pronouns too, just like the word 'sun-and-moon' (*puṣpavant*), are not ambiguous but have a univocal meaning. Now a pronoun reveals (such an object as) a pot, a cloth, and so on, as is the object of the speaker's thought, under a specific mode being-a-pot, being-a-cloth, and so on; not under the mode being-an-object-of-the-speaker's thought....(The problem) however is that it is impossible to have a univocal meaning (for the pronoun), when (its reference) is in this way delimited by many different properties, as there are in the case of 'sun-and-moon', for (the hearer) cannot (then) come to understand a particular object as qualified merely by a single property. For this reason, the ambiguity of pronouns is hard to keep in check.

(E91ff.; G224) "Here is my view. When the properties which are the delimiters of the scope (*śakyatāvachedaka*), like being-a-pot, being-a-cloth, and so on, appear in the divine mandate (for 'it') as qualified by the indicator (*upalakṣaṇa*) property being-the-mode-in-the-speaker's-thought, they appear there as the modes in the hearer's thought caused by the word 'it'. The mandate has the form "From the word 'it', that which is delimited by such a property as is the mode in the speaker's thought is to be understood", or else "the word 'it' makes understood that which is delimited by such a property as is the mode in the speaker's thought". Although the content of this mandate resides in the uncollected (*ananugata*) properties being-a-pot, being-a-cloth, and so on, the meaning (of 'it') is

unitary because those properties are delimited by the property being-the-mode-in-the-thought-of-the-speaker-who-uttered (the word). In just the same way, while the content of the mandate for the word 'pot' or 'cloth' resides in the many individual pots, the meaning of the word 'pot' is unitary because those objects are delimited by the common property being-a-pot. Again, while the content of the mandate for the word 'beast' reside in the many individual tails and so on, the meaning of the word 'beast' is unitary because they are delimited by the common property having-a-tail.

"This is the difference (between the two cases). The properties being-a-pot, having-a-tail, and so on are said to be 'qualifying features' (*viśeṣaṇa*), because they appear as modes in the hearer's thought produced by the word ('pot", etc.). However, the mandate (for 'it') does not make the property being-the-mode-in-the-thought-of-the-speaker appear as a mode in the hearer's thought produced by the word 'it', but merely as being co-located with such modes. So it is called an indicator (*upalakṣaṇa*).

"While the content of the mandate for the ambiguous word 'Hari' resides in the uncollected properties being-Hari, being-a-lion, and so on, the meaning of the word 'Hari' is not unitary because those properties are not delimited by any common property. In the divine mandate, the properties being-Hari and so on appear as modes in the hearer's though produced by the word 'Hari', without appearing as qualified by any indicator property. So the ambiguity (of such words) is not lost.

(G235ff.) "The first-person pronoun distinguishes all three grades of meaning isolated by Gadādhara: reference (*śakya*), mode (*śakyatāvacchedaka*), and constant, or running, element (*anugama*). The reference of the word 'I' is a person. Each time I utter that pronoun it refers to the same person, myself. The reference is indexical: for each person it is true that when they utter the pronoun it refers to them. What, then, serves as the distinguishing property of the reference, the mode under which I identify myself when I use the word 'I", or by which you identify me when you her me use the word? Gadādhara claims that each person has a uniquely identifying property (*tadvyaktitva*), the property of being Caitra or the property of being Maitra, and it is in virtue of a person's possessing this property that they identify themselves as the reference of their utterance of the word 'I". But, says

Gadādhara:

(E108-109; G237) 1The meaning of the first and second person pronouns is not merely a person, but one who is an agent of uttering or hearing. It is not in general right to say that the mode is by definition such a property as Caitra-hood which is indicated by a running element in the (simple) form of being-the-utterer or being-the-audience....The meaning of the first person pronoun is that object which is delimited by such a property (viz. Caitra-hood) as is indicated by the property of being-the-agent-of-that-very-utterance (*sva-uccāraṇa-kartṛtā*).'

(G238) "Gadādhara finds such an account problematic for a reason which is of great philosophical interest. His worry concerns the role of the pronoun when it occurs within a direct report of someone else's speech--that is, within Sanskrit *iti* constructions....The problem, then, is to explain how it is that a report of the form 'Caitra said "I am going out"' means the same as 'Caitra said he is going out', and does not state that Caitra said that I, the speaker, am going out.

"Gadādhara offers two distinct solutions to the problem...the 'paratactic' and the 'anaphoric' solutions.....

(1 The paratactic solution:) (G240) The explanation is that the (above) rule covering the use of the first person pronoun is (applicable only to) an independent utterance, that is an utterance not depending on another person's self-referential utterance.

(2. The anaphoric solution:) (G242) The meaning of the first person pronoun in dependent cases is the agent of the other sentence, whose patient is the meaning of the sentence containing the pronoun."

(E118-119) The word "you" (*yuṣmat*) and 'I' (*asmat*) denote 'to be addressed' and "pronouncer" respectively.

(E137) The word "*sarva*" (all) means totality. In the example "all pots are colorful" the totality expressed by the word "all" in pots are limited by pot-ness. Here pot-ness is expected by subjectivity. So it can be said that totality is the meaning of the word "all".

(E162-168) The word "'*kim*" (interrogative: who, what, which) denotes the thing that is desired to know. Thus to convey one's own desire the sentence in the form of a question is put with the suitable interrogative. There are two interrogatives available. One is subjective and the other is objective: "who cooks?"' (*kaḥ pacati*) and "who is he?" (*ayaṃ kaḥ*) are examples respectively.

(E175) The word "*yat*" is a relative pronoun corresponding to 'who', 'which' or 'what'. Its proper correlative is "*tat*". The word "*yat*" has its denotative force in the thing which is to be presented by the word "*tat*", and also what is particularized by the attributive and which is the distinguishing object in the speaker's knowledge. Thus wherever the verbal knowledge is through the word "*yat*" there must necessarily be the relative word "*tat*". This is the case where the sentence beings with the word "*yat*".

(E177) In the same way the word "*tat*" has as its denotation the thing which is presented by the word "*yat*". Hence the word "*tat*" invariably depends on "*yat*". So it is common experience that we may not get the idea of bringing a jar from hearing the sentence "bring that, the jar is here" (*tamānaya ghata ihāsti*), where we do understand such a meaning from "bring that which is here" (*tamānaya ya ihāsti*).

(E177) There is another word "*tat*" that means a famous thing, for example,"that splendid digit of the moon" (*kalā ca sā kāntimatī*).

(E179) "*Idam*" and "*etat*" mean "this here". These words refer to what is nearest to the speaker. Both denote those things which are subjects of perceptual awareness.

(E180) "*Adas*" meams "that". The word *adas* refers to a person or thing which is not present or near to the speaker. This designates those things which are not objects of perceptual awareness.

(E181)"The word "*sva*" means a thing which is presented by another word associated in the same sentence. Association of words in one sentence is called *samabhivyāhāra*.

(E189) The word "one" (*eka*) means a unique thing. Uniqueness is that which excludes similar things.

Chapter Three (*pariśiṣṭakāṇḍa*)

Chapter Three is divided by Gerschheimer into sections numbered from III to VIII. As noted previously, we provide here Gerschheimer's brief summaries of these sections, with page references to her two volume work cited at the outset, here abbreviated as "G".

(G413-432) "III.1 describes the theory of some Mīmāṃsakas [namely Prābhākaras] who believe that *śakti* is an entity similar to *śakti*-potentiality, that is to say an entity which circumscribes a given causality, here the causality of the word in relation to the verbal cognition of an object. Insofar as these theoreticians deny that a tropological [i.e., figurative] word is the cause of the verbal cognition of its object, we can easily show that tropological words do not have *śakti*."

(G433-457) "III.2 refutes the theory described in III.1. An essential part of the refutation relates to the problem of tropological words.

"IV offers a solution to the main problem posed by the Naiyāyika theory of *śakti*, namely the unwarranted extension of the concept of the expressed to tropological objects (the solution can also apply to corrupted forms). The solution is based on the difference between the structure of divine desire in expressing words and in tropological words.

(G472-479)"V.1 describes the *anvitābhidhāna* theory, stating that the syntactic relation (*anvaya*) between two word objects which appears to verbal cognition is also expressed, by virtue of a law which says that everything which appears in verbal cognition should first be recollected with the help of a relationship of reference.

(G480-496) "V.2 refutes this theory by showing that the law in question is too general, and stating a more specific law. To conclude this debate, it is said that the appearance of a syntactic relation in verbal cognition is primarily due to expectancy (*ākāṅkṣā*).

"At the end of V, it is said that the *śakti* of the word '*go*' only relates to the entity qualified by cow-hood (*gotvaviśiṣṭa*-). VI.1 (G497-501) develops this point, and explains that the expression 'X-*viśiṣṭe śaktiḥ*' means 'the *śakti* [of the word x] pertains to X - the basis for the application (*pravṛttinimitta*) of the word-, to the qualification (*vaiśiṣṭya*) by X and to the substratum of X. VI.2 (G502-512) clarifies the *viṣayatās* of the divine desire which makes up the relationship between the desire and the three objects of the word x, i.e. X, the qualification by X and the substratum of X. Despite the fact that these *viṣayatās* are distinct, it is still possible to say that there is only one *śakti* for a given word. VI.3 (G512-519) (states the conditions under which a word object enters into a syntactic relation with another word object, so that this connection does not occur with *pravṛttinimitta* X. A theory which states simpler conditions is refuted with a counter-example.

"VII (G520-529) deals with the structure of the knowledge of *śakti* which is the cause of the verbal cognition of an entity qualified by a given property in a given relation.

"The two versions of *siddhānta* (VII.2) only show minor differences in wording. The main variation relates to the tnnity which determines the expressed object in the knowledge of *śakti*: Version A says this entity is desire, connected to the object by *viṣayatā*; version B says it is the word, which is connected to the object by the same *viṣayatā*. This variation reflects the difference between the two theories as regards the nature of the relationship between the expresser and the expressed. Whereas version A is based on the theory that this relationship is desire, version B sees this relationship as a *viśayatā* of the desire.

"VIII.1 (G530-536) states a theory which is mainly defended by Raghunātha, where the basis for the application of a word is not expressed by the word (this means that only the individual cow is expressed by the word '*go*'.). That cow-hood, for instance, should appear in verbal cognition as a determinant of cow, can be explained by the fact that this universal appears as the entity which circumscribes the determinicity (*viṣayatāvacchedaka*) in apprehending the expressive capacity of the word '*go*'.

"VIII.2 (G537-540 refutes this theory with the help of a counter-example of modern convention. The postulate is that knowledge of modern convention and knowledge of expressive capacity are causes of verbal cognition in the same form."

70.319 GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Vyutpattivāda*

Most editions comprise only the first two Books of this work, and the only English translation, by V. P. Bhatta (Delhi 1990) translates only those two books, though Bhatta promises a second volume, not seen as yet, completing the task. Bhatta's "E" is the edition used in "T" to identify translated passages: it is by Pt. Hariraj (Bombay 1911).

A more extensive summary of the initial portion of the text, with edition of the text of that portion with seven commentaries, is available in print by Achyutananda Dash from Delhi, 2004. Dash has also edited the first chapter with two commentaries, Pune 2003.

Summary by Sri Narayana Misra

Language is the most important means for social communication. In spite of the difference of opinion regarding

the units of language, the Naiyāyika believes that the word is the unit of meaning. It is an established fact in Nyāya that it is the sentence which serves the purpose of language, which is communication of ideas. In a sentence words are combined, which implies that the meanings of words are mutually related. Since no element is expressed in a sentence to denote the mutual relation of the meanings, the question arises how these relations are to be expressed. Among the different answers to this question in different philosophical systems, the Nyāya view is that these relations, particularly in the case of expressions using compounds and expressions where the qualifying word is used in apposition, are indicated by mutual expectancy. Two systematic works in the Nyāya system deal with this topic, the *Śabdaśaktiprakāśikā* by Jagadīśa and this *Vyutpattivāda* by Gadādhara. The former is more comprehensive, dealing in detail with all the aspects of structure of the Sanskrit language. In the latter work, however, the author has taken up only such topics where he differs from Jagadīśa. In cases where he does not differ he either dismisses the topic or treats it briefly. Gadādhara thus begins with the statement that in a verbal expression mutual relations of the meanings of words are indicated by means of mutual expectancy. Dividing these relations into two as non-difference and difference, the author discusses whether in an expression not using compounds, the inflection of the qualifying words used in apposition to a qualificand denotes a relation or is simply meant for giving that inflection to the words so that they can be used in a sentence. Since according to the Nyāya view the word is the unit of language, the author, keeping in mind the analysis of words, deals with four topics: nominal bases (*prātipadika*) and their inflections (i.e. their declensional endings), and verbal roots and their inflections (i.e., conjugational endings), both in general and in particular. In addition, he also discusses some important primary and secondary suffixes.

Kāraka I

(E1-3; T45) The relation (*saṃsarga*) of the meaning of one word to another is twofold: one aspect is non-difference (*abheda*), the other is difference (*bheda*).

(E3-19; T45-54) The relation of non-difference can be described as follows: In a sentence in which words are used in compounds, the relation of words is based on expectancy, whereas in expressions not involving compounds the relation of

words is based either on the same expectancy or on case endings. For example, *nīla ghaṭa* ("blue pot") expresses blue and pot; the relation between the two is based on mutual expectancy. Accordingly, the meaning of this sentence is a pot qualified by blue (*nīla*) by the relation of non-difference (*abhedasambandhena nīlaviśiṣṭo ghaṭaḥ*). Similarly, in the expression *rājapuruṣaḥ* the relation of non-difference between the king and the man is based on expectancy; the meaning of the sentence is "a man qualified by possessor-ness through the relation of ownership" (*svatvasmbandhena rājaviśiṣṭaḥ puruṣaḥ*).

(E20-35; T55-59) But where the relation of non-difference is to be understood in an expression without compounds, two different views exist. According to the first view, the inflection after the qualifying word (*viśeṣaṇavibhakti*) does not communicate any meaning, but serves to make the word usable (*pariniścita*--a word which can be used in a sentence). Thus, e.g., in the expression "*nīlo ghaṭaḥ*" the nominative ending after the word "*nīla*" makes the qualifying word usable in the sentence but has no meaning whatsoever; the relation of non-difference between "blue" and "pot" is based on expectancy. According to the second view, however, the inflection after a qualifying word denotes some relation. Thus in the above expression the relation of non-difference between "blue" and "pot" is communicated by the nominative ending after the word "*nīla*"; there is no need for any expectancy. Similarly, the word's inflection can denote a relation of difference described as follows: in an expression without compounds where a relation of difference is to be understood, it is the inflection after the qualifying word which denotes the relation of difference. For example, in the expression "*rājñaḥ puruṣaḥ*" the relation of difference between the king and the man is expressed by the genitive singular ending after the word "*rājan*."

These two views described above are known as the *saṃsargatāvāda* and *prakāratāvāda* respectively. The relation based on expectancy is called "*saṃsargatāvāda*", but the relation based on words and case endings, etc. is called "*prakāratāvāda*".

(E36-58; T59-75) The relation of non-difference based on expectancy occurs only in a sentence where the qualifying word is expressed immediately before the word which it qualifies and has the same case ending as the word it qualifies. These case endings are sometimes not expressed, e.g., in neuter gender and compound expressions. The number and gender of the qualifying word may differ from that of the qualified, but the difference in number is allowed only in those expressions where a number contrary to that denoted by the case ending of the word standing for the qualified (*viśeṣya*) is intentionally expressed; otherwise, the number of both words must be the same.

The author discusses various views concerning the meaning of "non-difference" (*abheda*) and concludes that "non-difference" means identity (*tādātmya*). His discussion then continues with a consideration of the impossibility of the correctness of an expression such as "*ghaṭo ghaṭaḥ*". It is argued that the relation of non-difference is possible only between two meanings which are conveyed by words having different forms.

(E58-72; T76-83) The relation of difference occurs only between the meanings of nominal bases (*prātipadika*), verbal roots (*dhātu*), and their inflectional endings (*pratyaya*); the meanings of two nominal bases alone cannot directly be combined by the relation of difference. Sometimes the meanings of nominal bases and verbal roots are construed with the meaning of a particle (*nipāta*). In the author's opinion the relation of difference is not possible in an expression like *rājapuruṣaḥ* because such an expression is not conventionally used to communicate the relation of difference.

(E90-95;T105-107) Non-dual suffixes (*pratyaya*) are divided into different types, as inflections (*vibhakti*), primary and secondary suffixes (*kṛt* and *taddhita* respectively). Inflections are of two types, declensional and conjugational. Declensional suffixes have seven divisions.

(E95-105; T107-121) Nominative case endings denote number which is construed as a qualification to the meaning of its base (*prakṛti*). Rejecting the view of some grammarians that number is expressed by the base itself and not by the case ending, Gadādhara holds that number is to be construed with the meaning of the base by the relation of *paryāpti* alone and not by any other relation. A detailed discussion on the nature and use of *paryāpti* follows.

(E105-167; T121-136) The nominative case ending generally denotes the number and not the meaning of the base; sometimes, however, it denotes the number of the delimiter of the meaning of the base (*prakṛtyarthatāvacchedaka*). As an example, consider *vedaḥ pramāṇam*. Here the singular case ending after the nominal base *pramāṇa-* denotes the number of the *prakṛtyarthatāvacchedaka*, which is the property of being

the most important instrument (*karaṇa*) for acquiring veridical cognition (*pramā*). Similarly, the nominative case ending when used after a nominal base which expresses a number opposite/contrary to the number expressed by the case ending denotes the number of *prakṛtyarthatāvacchedaka*. Thus in the expression "*śatam ekam*" the singular nominative case ending of *śatam* denotes the number of *prakṛtyarthatāvacchedaka*, which is *śatatva* in this example. In contrast, the nominative case endings used after the nominal bases *eka-*, *dvi-*, and *bahu-* do not express any number, but serve only to make the numerals employable in a sentence. Likewise, the plural nominative case ending which occurs after words used always in the plural (e.g. *āap*, *dārā*) does not convey any number.

(E109-112; T136-152) With regard to the conjugational suffixes in singular number, however, two different views exist. Some hold that these suffixes do not convey any number, whereas others hold that they do denote a number. The author points out that since there are also dual and plural conjugational suffixes, these inflections must denote the respective numbers. But the singular conjugational ending, e.g. *-ti*, need not convey the number of the subject, or of the object in a passive sentence, because that number is already expressed by the declensional singular nominative case ending used with the subject or object.

Kāraka II

(This section discusses various of Pāṇini's rules concerning the use of the various case-endings starting with the accusative.)

(E206-212) Gadādhara takes up *liu* and *lot* which mean "injunction" (*vidhi*) because they are used for getting others to be engaged in an activity. *Vidhi* is identified as a property being the content of an awareness that is instrumental in one's activity (*pravartakajñānaviṣayadharma*). This property, according to the Nyāya view, includes the property of possibility of permanence (*kṛti sādhyatva*) and the property of being instrumental for the accomplishment of a desired result (*iṣṭasādhanatva*), along with the property of not being connected with a more harmful result (*balavadaniṣṭānanubandhitva*).

Gadādhara proposes the Mīmāṃsā view according to which the property of being instrumental for getting a desired objective accomplished (*iṣṭasādhanatva*) is not the meaning of the *vidhi* because in the case of obligatory duties which do not bring forth any positive result it is impossible to prove such a property. (For the Mīmāṃsā, obligatory duty does not bring any positive result, but not performing these obligatory duties increases evil.)

Gadādhara disagrees with the Mīmāṃsakas in that obligatory duties, such as *sadhyābandhana (pūjā)*, do bring the result of preventing one from going to hell. Rejecting the Mīmāṃsā view proves the absolute absence of hell is a desired result for which performance of obligatory duties is instrumental; so he proves that such a property of being instrumental for a desired result (*iṣṭa*) is very much present, even in the performance of obligatory duties.

70.320. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Sādṛśyavāda*

This work, and the next four listed below (325-327), are seemingly unpublished.

70.321. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Ratnakośavāda*

70.322. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Karaṇatāvāda*

Manuscript cited at NCat 9, 406.

70.323. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Anumitimānasavāda*

See above.

70.324. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Navyamatavāda*

See above.

70.325. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Apūrvavāda*

See NCat I, 256 for manuscript citations.

70.326 GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Apabhraṃśavāda*

See NCat I, 243 for manuscript citations.

70.327. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Śabdaprāmāṇyavādarahasya*
Edited in Sastramuktavali Series (?)

70.328. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Sārvabhaumamatapariṣkāra*
Edited in Telugu script, Mysore 1885.

70.329. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Abhāvādhikaraṇavāda*
See NCat I, 281 for manuscript citations.

70.330. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Ākhyātavāda*
See NCat II, 8 for manuscript citations.

70.331. GADĀDHARA BHAṬṬĀCĀRYA CAKRAVARTIN, *Viśiṣṭavāiśiṣṭyabodhavicāra*
CSCR 20, pp. 52-53 says this is printed in *Vādavaridhi* no. 5, pp. 25-52, and summarizes it as follows: "The discussion of Viśiṣṭavaiśiṣṭyavāda, that is, of perception of entity and non-entity in the same *adhikaraṇa* is the subject of the chapter on *Vyadhikaraṇa-dharmāvacchinnābhāva* in *Tattvacintāmaṇi*. The discussion of *viśiṣṭavaiśiṣṭya,* that is, connection with the connected *abhāva,* arises out of that discussion. So, this discussion is not to be found either in TC or its *Dīdhiti,* but arises after the commentary of Jagadīśa. So the present work is later than Jagadīśa's."

GLOSSARY-INDEX

(Dates given are approximations–indeed, all that is suggested is that the person referred to may have been alive at that time!)